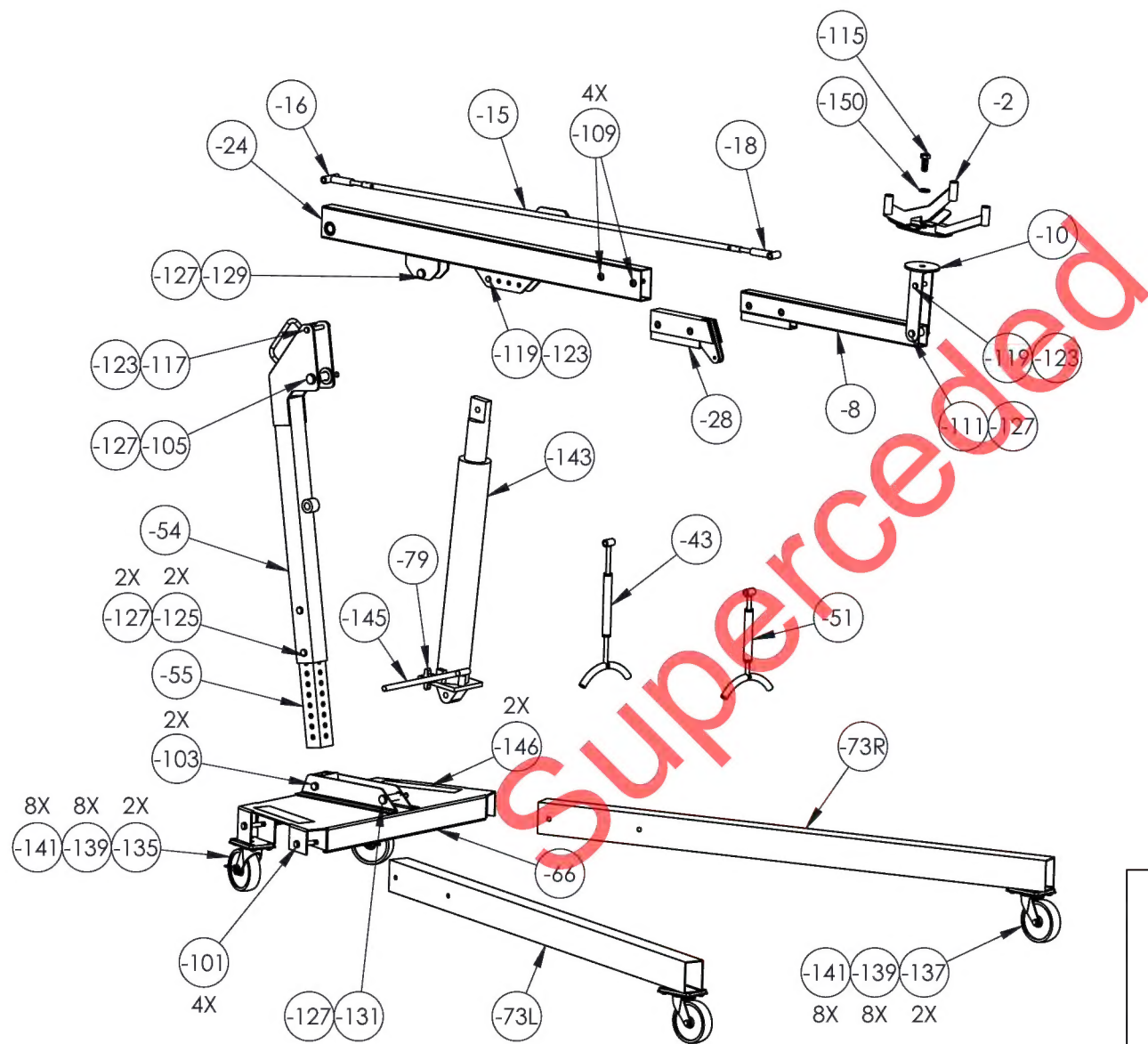


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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



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dartaerospace.com

TITLE MD-500 ENGINE LIFT			
DWG NO. RBT18625	REV 11	CUSTOMER 1 OF 2	
SCALE 1:16	DATE 8/11/2004	SHEET 1 OF 74	

## CUSTOMER PARTS LIST

ITEM #	Description	QTY.	Part #
-2	TRANSMISSION ADAPTER	1	RBT18625-002
-8	TRANSMISSION ADAPTER TUBE	1	RBT18625-008
-10	TRANSMISSION ADAPTER PIVOT	1	RBT18625-010
-15	TIE-ROD ASSEMBLY	1	RBT18625-015
-16	LH BUSHING ASSEMBLY	1	RBT18625-016
-18	RH BUSHING ASSEMBLY	1	RBT18625-018
-24	BOOM ASSEMBLY	1	RBT18625-024
-28	ENGINE ADAPTER ASSEMBLY	1	RBT18625-028
-43	LARGE TURNBUCKLE ASSEMBLY	1	RBT18625-043
-51	SMALL TURNBUCKLE ASSEMBLY	1	RBT18625-051
-54	UPRIGHT ASSEMBLY	1	RBT18625-054
-55	MAST	1	RBT18625-055
-66	BASE PLATE ASSEMBLY	1	RBT18625-066
-73R	RIGHT LEG WELDMENT	1	RBT18625-073R
-73L	LEFT LEG WELDMENT	1	RBT18625-073L
-79	KNOB ASSEMBLY	1	RBT18625-079
-101	HEX BOLT 3/8-16 X 2-3/4	4	RBT18625-101
-103	HEX BOLT 7/16-14 X 2-3/4	2	RBT18625-103
-105	CLEVIS PIN Ø3/4 X 2-1/2	1	RBT18625-105
-109	B.H. SOCKET HEAD CAP SCREW 3/8-16 X 5/8	4	RBT18625-109
-111	CLEVIS PIN	1	RBT18625-111
-115	HEX BOLT 1/2-13 X 1-1/4	1	RBT18625-115
-117	CLEVIS PIN	1	RBT18625-117
-119	CLEVIS PIN	2	RBT18625-119
-123	HAIRPIN FOR Ø3/8 CLEVIS PIN	3	RBT18625-123
-125	CLEVIS PIN	2	RBT18625-125
-127	HAIRPIN FOR Ø7/16 CLEVIS PIN	6	RBT18625-127
-129	CLEVIS PIN	1	RBT18625-129
-131	CLEVIS PIN	1	RBT18625-131
-135	SWIVEL CASTER W/BRAKE	2	RBT18625-135
-137	RIGID CASTER	2	RBT18625-137
-139	B.H. SOCKET HEAD CAP SCREW 5/16-18 X 3/8	16	RBT18625-139
-141	LOCK WASHER Ø5/16	16	RBT18625-141
-143	HYDRAULIC JACK	1	RBT18625-143
-145	HANDLE HYD. JACK	1	RBT18625-145
-146	NO-SKID	2	RBT18625-146
-150	FLAT WASHER Ø1/2	1	RBT18625-150



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TITLE

MD-500 ENGINE LIFT

DWG NO.

RBT18625

REV

11

CUSTOMER 2 OF 2

SCALE

1:1

DATE


8/11/2004

SHEET

2 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		- <b>63</b> FOLDED TABS DELETED FROM BENDS.	4/25/2003		
2		- <b>15</b> TIE-ROD STRETCHED TO MATCH REVISED TRANSMISSION ADAPTER.	11/6/2003		
3		- <b>63</b> FRONT SLOTS OPENED ON THE INSIDE BY .1285, FRONT FACE NOW 22.75 LONG, SQUARE HOLE LOCATION & FORMED EDGE ADJUSTED TO ACHIEVE DESIRED ANGLE.	11/18/2004		
4		- <b>15C</b> TUBE WALL INCREASED FROM .049 TO .063	11/19/2004		
5		RE-ORGANIZED ENTIRE FILE & CREATED CUSTOMER PURCHASE LIST.	12/8/2006	WP	
6		CH'D TITLEBLOCK & REVISION BLOCK, CH'D REVISIONS TO NUMERICAL, - <b>27A</b> AND - <b>28</b> ADDED -27A SPACER.	7/7/2009	RJC	
7		- <b>25</b> CH'D WALL FROM .083. - <b>79</b> & - <b>81</b> ADDED ROLL PIN & KNOB DRAWING.	10/1/2009	WP	
8		- <b>60</b> CH'D DESCRIPTION FROM BACK PLATE. - <b>76</b> ADDED PART DRAWING.	11/9/2009	RJC	RW
9		- <b>15</b> CH'D OVERALL LENGTH FROM 52.25 PER G.E. - <b>63</b> CH'D LASER PATTERN DIMS, CH'D HOLE LOCATION TO 1.500. - <b>67</b> AND - <b>69</b> CH'D HOLE FROM Ø.386 TO Ø.397.	1/18/2012	RJC	RW
10		- <b>15D</b> ADDED PART. - <b>28</b> CORRECTED DIM FROM .313 TO .281. - <b>15D</b> ADDED PART. - <b>31</b> CH'D Ø.62 TO REFERENCE DIM. - <b>33</b> CH'D Ø.638 TO REFERENCE DIM. OF .62. - <b>60</b> CH'D WIDTH FROM 2.06 TO 2.01. - <b>63</b> REMOVED FLAT PATTERN. - <b>65L</b> AND - <b>65R</b> CH'D HOLE DIM. FROM BEND LINE TO BASE. - <b>67</b> AND - <b>69</b> CH'D DIM. FROM 1.530 TO 1.500 TO FIT -63 BASE. - <b>73</b> ADDED DIMENSIONS FOR 2 HOLES.	9/17/2013	JAG	
11	15-0361	- <b>2</b> , - <b>3</b> , - <b>5</b> , - <b>7</b> , - <b>8</b> , - <b>10</b> , - <b>11</b> , - <b>13</b> , - <b>15</b> , - <b>16</b> , - <b>17</b> , - <b>18</b> , - <b>19</b> , - <b>23</b> , - <b>24</b> , - <b>25</b> , - <b>26</b> , - <b>27</b> , - <b>27A</b> , - <b>28</b> , - <b>41</b> , - <b>53</b> , - <b>54</b> , - <b>57</b> , - <b>59</b> , - <b>60</b> , - <b>62</b> , - <b>63</b> , - <b>65L</b> , - <b>65R</b> , - <b>66</b> , - <b>67</b> , - <b>69</b> , - <b>71</b> , - <b>73L</b> , - <b>73R</b> , - <b>73</b> , - <b>75</b> , - <b>76</b> CH'D DRAWING SHEET TO SHEETMETAL TOLERANCE. - <b>3</b> , - <b>9</b> , - <b>11</b> , - <b>14</b> , - <b>15D</b> , - <b>16B</b> , - <b>18B</b> , - <b>27</b> , - <b>27A</b> , - <b>31</b> , - <b>33</b> , - <b>41</b> , - <b>53A</b> , - <b>60</b> , - <b>62</b> , - <b>75</b> CH'D MATERIAL WAS 1018 IS 1018/1020 CR. - <b>7</b> , - <b>17</b> , - <b>63</b> , - <b>65L</b> , - <b>65R</b> , - <b>67</b> , - <b>69</b> , - <b>71</b> , - <b>76</b> CH'D MATERIAL WAS HR IS A36/1018/1020 HR. - <b>19</b> , - <b>59</b> , - <b>69</b> CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR. - <b>21</b> CH'D MATERIAL WAS CDS IS DOM. - <b>16A</b> , - <b>18A</b> CH'D MATERIAL WAS 1018 IS CDS. - <b>3</b> CH'D DIM WAS 2X R.25 IS 2X R.25 +01-.00. - <b>5</b> ADDED MISSING DIM'S (25°), .75 AND .08, DELETED ONE 22° CUT OUT FROM FLAT PATTERN. - <b>7</b> ADDED REFERENCE FLAT PATTERN. - <b>9</b> CH'D DIM WAS Ø.50 THRU ALL IS Ø.50 +01-.00 THRU. - <b>10</b> ADDED P/N -147 FOR WELD NUT. - <b>11</b> CH'D DIM WAS Ø.375 THRU ALL IS Ø.375 +010-.000 THRU. WAS Ø.500 THRU ALL IS Ø.500 +010-.000 THRU. - <b>12</b> CH'D DIM WAS (Ø.750) IS Ø.745 +000-.010, WAS (Ø.510) IS Ø.510. CH'D MATERIAL WAS CDS IS 1018/1020 CR, ADDED 2X .06 ±.03 X 45°. - <b>14</b> CH'D DIM WAS (Ø.625) IS Ø.615 +000-.010. - <b>15C</b> ADDED MISSING DIMS Ø.50 AND .38, CH'D DIM WAS 46.75 IS 46.75 ±.03, WAS 4X Ø.31 THRU ALL IS 4X .31 ±.03 THRU ALL, WAS 2X .50 IS 2X .50 ±.03. - <b>17</b> CH'D DIM WAS Ø.625 THRU ALL IS Ø.625 +010-.000 THRU ALL. - <b>19</b> CH'D DIM WAS 4X Ø.38 THRU ALL IS 4X Ø.38 +01-.00 THRU. - <b>21</b> CH'D DIM WAS (Ø.75) IS Ø.75 ±01-.00, WAS (Ø1.250) IS Ø1.250-1.246. - <b>23</b> ADDED MISSING DIM .08, CH'D DIM WAS Ø1.25 THRU ALL IS Ø.254-1.258 THRU ALL. - <b>25</b> ADDED MISSING DIM .12, CH'D DIMS WAS (1.250) IS 1.25, WAS (2.000) IS 2.00, WAS 2X Ø.625 THRU ALL IS 2X Ø.6310-6350 THRU ALL, WAS 68° IS 23°. DELETED DIMS (1.00) AND (6.96). - <b>26</b> ADDED MISSING DIM .07, ADDED NOTE 1. - <b>29</b> & - <b>45</b> CH'D DIM WAS Ø.63 IS .08 WALL THICKNESS, ADDED DIM 2X .625 ±.629 AND 2X .48. - <b>31</b> & - <b>33</b> CH'D DIM WAS (Ø.620) IS Ø.6190-.6162. - <b>53</b> ADDED MISSING DIM .10. - <b>55</b> ADDED MISSING DIM .11, CH'D DIM WAS 25.0 ±.25 IS 25.00±.25. - <b>57</b> ADDED MISSING DIM .10, CH'D DIM WAS 2X Ø.453 THRU ALL IS 2X Ø.453 +010-.000 THRU ALL, MOVED WELD NUT TO -66. - <b>59</b> CH'D DIM WAS Ø.375 THRU ALL IS Ø.375 +010-.000 THRU ALL, WAS Ø.750 THRU ALL IS Ø.750 +010-.000 THRU ALL. - <b>61</b> CH'D MATERIAL WAS 1018 IS DOM, CH'D DIM WAS Ø.750 IS Ø.750 +010-.000. - <b>63</b> DELETED 2X MUST SLIP FIT 3 X 2 TUBING. CH'D DIM WAS 4X Ø.397 ±.13 IS Ø.44 ±.13, WAS 2.00 IS 2.05 +005-.000, WAS 2.02 IS 2.05 +005-.000. - <b>65L</b> CH'D DIM WAS Ø.438 THRU IS Ø.438 +010-.000 THRU, WAS Ø.625 THRU IS Ø.625 +010-.000 THRU. - <b>65R</b> CH'D DIM WAS Ø.438 THRU ALL IS Ø.438 +010-.000 THRU ALL, WAS Ø.625 THRU ALL IS Ø.625 +010-.000 THRU ALL, MOVED -148 TOP -66. - <b>66</b> ADDED DIM 9° ±1, ADDED MISSING WELD SYMBOLS, ADDED -148 AND -149. - <b>67</b> MOVED 3/8-16 WELD NUT (-149) TO -66, CH'D DIM WAS Ø.397 THRU ALL IS Ø.397 +010-.000. - <b>69</b> CH'D DIM WAS Ø.397 THRU ALL IS Ø.397 +010-.000, MOVED 3/8-16 WELD NUT (-149) TO -66. - <b>73L</b> CH'D DESCRIPTION WAS LEFT LEG IS LEFT LEG WELDMENT. - <b>73R</b> CH'D DESCRIPTION WAS RIGHT LEG IS RIGHT LEG WELDMENT. - <b>73</b> ADDED MISSING DIM'S .08 AND 2.00, CH'D DIM WAS 2X Ø.386 THRU ALL IS 2X Ø.397 THRU ALL. - <b>81</b> CH'D P/N WAS MSC #82397449 IS MSC #82397241, ADDED BLACK OXIDE FINISH. - <b>119</b> CH'D B/O P/N WAS 98306A277 IS 98306A275. - <b>125</b> WAS 97245A IS 98306A334. - <b>127</b> WAS 98335A061 IS 98335A127 & CH'D QTY. WAS 2 IS 6. ADDED P/N'S FOR THREE WELD NUTS, - <b>147</b> , - <b>148</b> , - <b>149</b> , ADDED - <b>150</b> , and - <b>151</b> . DELETED - <b>113</b> , - <b>121</b> , - <b>133</b> .	11/16/2015	RJC	JAG

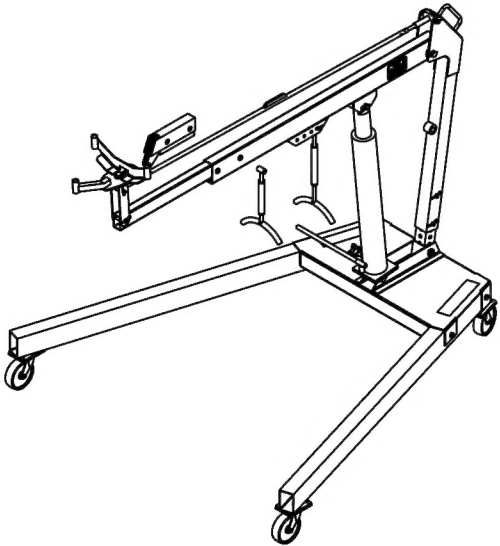
	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625	REV 11
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:1	DATE 8/11/2004
SHEET 3 OF 74	




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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED

ASSY QTY -79	ASSY QTY -73L	ASSY QTY -73R	ASSY QTY -66	ASSY QTY -54	ASSY QTY -51	ASSY QTY -43	ASSY QTY -28	ASSY QTY -24	ASSY QTY -18	ASSY QTY -16	ASSY QTY -15	ASSY QTY -10	ASSY QTY -8	ASSY QTY -2	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
														X		-2	1	TRANSMISSION ADAPTER			6
														2		-2A		ATTACH TUBE	CDS		7
														1		-2B		ATTACH TUBE	CDS		8
														1		-3		ATTACH PLATE	1018/1020 CR		9
														1		-5		BRACKET	STEEL TUBE		10
														1		-7		WING BRACKET	A36/1018/1020 HR		11
													X			-8	1	TRANSMISSION ADAPTER TUBE			12
											1					-9		DISK	1018/1020 CR		13
											X					-10	1	TRANSMISSION ADAPTER PIVOT			14
											2					-11		STRAP	A36/1018/1020 HR		15
											1					-12		BUSHING	1018/1020 CR		16
											1					-13		ADAPTER TUBE	STEEL TUBE		17
							2					2				-14		THREADED BUSHING	1018/1020 CR		18
											X					-15	1	TIE-ROD ASSEMBLY			19
											1					-15A		LH THREAD	STEEL	3/8-16 UNC -2A LH (MCMaster-CARR #95625A150) MODIFIED	20
											1					-15B		RH THREAD	STEEL	3/8-16 UNC -2A (MCMaster-CARR #98957A735) MODIFIED	21
											1					-15C		TIE-ROD TUBE	CDS		22
											1					-15D		TAB	1018/1020 CR		23
										X						-16	1	LH BUSHING ASSEMBLY			24
										1						-16A		EYE	CDS		25
										1						-16B		LH THREAD BUSHING	1018/1020 CR		26
							2									-17		RAM ATTACH	A36/1018/1020 HR		27
								X								-18	1	RH BUSHING ASSEMBLY			28
								1								-18A		EYE	CDS		29
								1								-18B		RH THREAD BUSHING	1018/1020 CR		30
								2								-19		TURNBUCKLE ATTACH	A36/1018/1020 HR		31
								1								-21		BUSHING	DOM		32
								1								-23		BOOM	STEEL TUBE		33
								X								-24	1	BOOM ASSEMBLY			34
							1									-25		ENGINE ADAPTER TUBE	STEEL TUBE		35
								1					1			-26		TUBE	STEEL TUBE (.08 WALL TH)		36
								2								-27		ENGINE ATTACH	1018/1020 CR		37
								1								-27A		SPACER	1018/1020 CR		38
								X								-28	1	ENGINE ADAPTER ASSEMBLY			39
																-29		TUBE	CDS		40
						1										-31		LH THREADED BUSHING	1018/1020 CR		41
						1	1									-33		THREADED BUSHING	1018/1020 CR		42
						1	1									-35		EYE	CDS		43
							1									-37		LH THREADED STUD	STEEL	3/8-16 UNC -2A LH (MCMaster-CARR #95625A150) MODIFIED	44
							1									-39		THREADED STUD	STEEL	3/8-16 UNC -2A (MCMaster-CARR #98957A735) MODIFIED	45
						1	1									-41		ARCH	1018/1020 CR		46
						2	2									-41A		HOSE	RUBBER Ø3/8 ID X 3-5/8 6LOLA		47, 51
							X									-43	1	LARGE TURNBUCKLE ASSEMBLY			47
						1										-45		TUBE	CDS		48
						1										-47		LH THREADED STUD	STEEL	3/8-16 X 2-1/2 LH (MCMaster-CARR #95625A150) MODIFIED	49
						1										-49		THREADED STUD	STEEL	3/8-16 X 2-1/2 (MCMaster-CARR #98957A735) MODIFIED	50
						X										-51	1	SMALL TURNBUCKLE ASSEMBLY			51
					1											-53		UPRIGHT	STEEL TUBE		52
					1											-53A		STORAGE RING	1018/1020 CR		53
					X											-54	1	UPRIGHT ASSEMBLY			54
																-55	1	MAST	STEEL TUBE	1-3/4 X 1-3/4 X .105 WALL X 25-1/2 PERFORATED (MCMaster-CARR #4931778)	55
				1												-57		SOCKET	STEEL TUBE		56
					2											-59		PIVOT BRACKET	A36/1018/1020 HR		57
					1											-60		HANDLE PLATE	1018/1020 CR		58
					2											-61		BUSHING	DOM		59
					1											-62		HANDLE	1018/1020 CR		60
ASSY QTY -79	ASSY QTY -73L	ASSY QTY -73R	ASSY QTY -66	ASSY QTY -54	ASSY QTY -51	ASSY QTY -43	ASSY QTY -28	ASSY QTY -24	ASSY QTY -18	ASSY QTY -16	ASSY QTY -15	ASSY QTY -10	ASSY QTY -8	ASSY QTY -2							

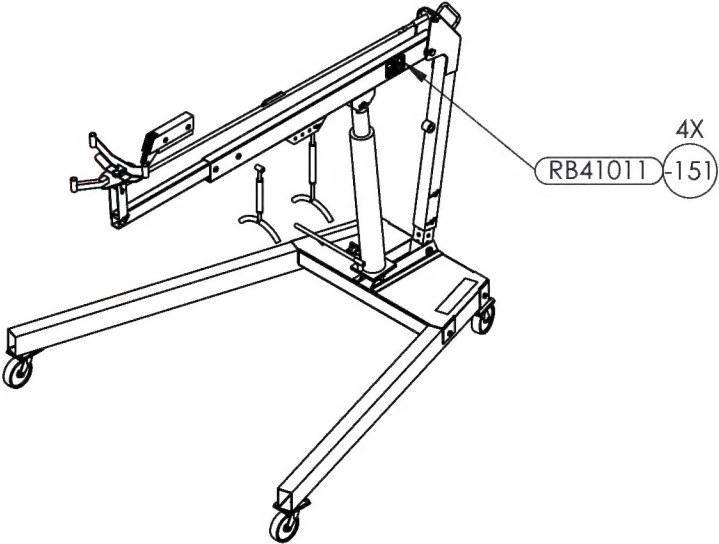


			
TITLE			
MD-500 ENGINE LIFT			
DWG NO.			REV
RBT18625			11
MAT'L		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ±.5°	
		.X ± .1 SURFACES = 125° ✓	
DRAWN BY:		1. BREAK ALL SHARP EDGES	
COLE		.015 x 45° OR .015R	
CHECKED:		2. DIMENSIONAL LIMITS APPLY	
DUERFELDT		AFTER PLATING	
OPPS APPR:		3. INTERPRET DIM AND TOL PER	
ANDERSON		ASME Y14.5M-2009	
QA APPR:		USED ON MODEL	
LINDSAY		MD-500	
APPROVED:			
GILBERT			
SCALE		DATE	
1:16		8/11/2004	SHEET 4 OF 74

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
APPROVED				

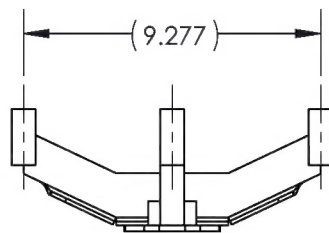
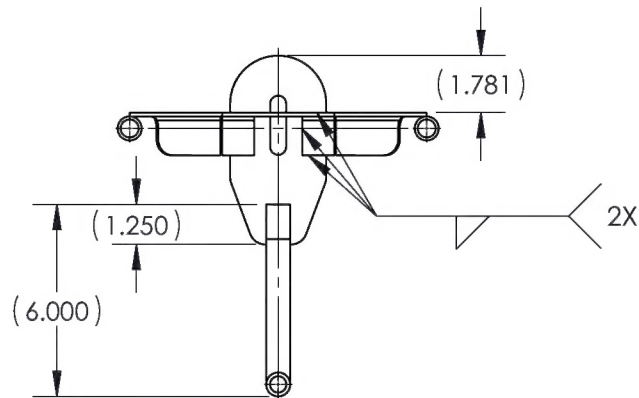
ASSY QTY -79	ASSY QTY -73L	ASSY QTY -73R	ASSY QTY -66	ASSY QTY -54	ASSY QTY -51	ASSY QTY -43	ASSY QTY -28	ASSY QTY -24	ASSY QTY -18	ASSY QTY -16	ASSY QTY -15	ASSY QTY -10	ASSY QTY -8	ASSY QTY -2	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			1													-63		BASE	A36/1018/1020 HR		61
			1													-65L		ANGLE BRACKET	A36/1018/1020 HR		62
			1													-65R		ANGLE BRACKET	A36/1018/1020 HR		63
			X													-66	1	BASE PLATE ASSEMBLY			64
			2													-67		FORWARD TAB	A36/1018/1020 HR		65
			2													-69		FORWARD TAB	A36/1018/1020 HR		66
			2													-71		STIFFENER	A36/1018/1020 HR		67
		X														-73R	1	RIGHT LEG WELDMENT			69
	X															-73L	1	LEFT LEG WELDMENT			68
	1	1														-73		LEG	STEEL TUBE		70
	1	1	2													-75		WHEEL PLATE	1018/1020 CR		71
				1												-76		BACK PLATE	A36/1018/1020 HR		72
X																-79	1	KNOB ASSEMBLY			73
1																-81		HAND KNOB	IRON	MSC #62397241 (MODIFIED)	74
1															B/O	-99		ROLL PIN	STEEL	Ø5/32 X 3/4 (MCMMASTER-CARR #90692A711)	73
															B/O	-101	4	HEX BOLT	STEEL	3/8-16 X 2-3/4 (MCMMASTER-CARR #91247A635)	1
															B/O	-103	2	HEX BOLT	STEEL	7/16-14 X 2-3/4 (MCMMASTER-CARR #91247A680)	1
															B/O	-105	1	CLEVIS PIN	STEEL	Ø3/4 X 2-1/2 USABLE (MCMMASTER-CARR #98306A560)	1
															B/O	-109	4	B.H. SOCKET HEAD CAP SCREW	STEEL	3/8-16 X 5/8 (MCMMASTER-CARR #91255A621)	1
															B/O	-111	1	CLEVIS PIN	STEEL	Ø1/2 X 1-1/2 USABLE (MCMMASTER-CARR #98306A385)	1
															B/O	-115	1	HEX BOLT	STEEL	1/2-13 X 1-1/4 (MCMMASTER-CARR #92865A714)	1
															B/O	-117	1	CLEVIS PIN	STEEL	Ø3/8 X 2-1/2 USABLE (MCMMASTER-CARR #98306A283)	1
															B/O	-119	2	CLEVIS PIN	STEEL	Ø3/8 X 1-1/2 USABLE (MCMMASTER-CARR #98306A275)	1
															B/O	-123	3	HAIRPIN	STEEL	FOR Ø3/8 CLEVIS PIN (MCMMASTER-CARR #98335A049)	1
															B/O	-125	2	CLEVIS PIN	STEEL	Ø7/16 X 2 USABLE (MCMMASTER-CARR #98306A334)	1
															B/O	-127	6	HAIRPIN	STEEL	FOR Ø7/16 -3/4 CLEVIS PIN (MCMMASTER-CARR #98335A127)	1
															B/O	-129	1	CLEVIS PIN	STEEL	Ø5/8 X 1-3/4 USABLE (MCMMASTER-CARR #98306A497)	1
															B/O	-131	1	CLEVIS PIN	STEEL	Ø5/8 X 2-1/4 USABLE (MCMMASTER-CARR #98306A501)	1
															B/O	-135	2	SWIVEL CASTER W/BRAKE		MSC #01507243	1
															B/O	-137	2	RIGID CASTER		MSC #01507417	1
															B/O	-139	16	B.H. SOCKET HEAD CAP SCREW	STEEL	5/16-18 X 3/8 (MCMMASTER-CARR #91255A576)	1
															B/O	-141	16	LOCK WASHER	STEEL	Ø5/16 (MCMMASTER-CARR #91150A113)	1
															B/O	-143	1	HYDRAULIC JACK		MSC #09050907	1
															B/O	-145	1	HANDLE HYD. JACK	STEEL		1
															B/O	-146	2	NO-SKID		GASKET SPECIALTIES 1.75 X 7.9	1
												1			B/O	-147		WELD NUT	STEEL	1/2-13 UNC (MCMMASTER-CARR #93560A180)	14
			2												B/O	-148		WELD NUT	STEEL	7/16-14 UNC (MCMMASTER-CARR #93975A350)	66
			4												B/O	-149		WELD NUT	STEEL	3/8-16 UNC (MCMMASTER-CARR #93975A300)	66
															B/O	-150	1	WASHER	STEEL	Ø1/2 (MCMMASTER-CARR #97744A285)	1
															B/O	-151	4	RIVET	ALUMINUM	Ø1/8 X .275 (MCMMASTER-CARR #97447A015)	5
															B/O		1	DART PLACARD	ALUMINUM	RB41011	5
ASSY QTY -79	ASSY QTY -73L	ASSY QTY -73R	ASSY QTY -66	ASSY QTY -54	ASSY QTY -51	ASSY QTY -43	ASSY QTY -28	ASSY QTY -24	ASSY QTY -18	ASSY QTY -16	ASSY QTY -15	ASSY QTY -10	ASSY QTY -8	ASSY QTY -2							



DART AEROSPACE		
TITLE		
MD-500 ENGINE LIFT		
DWG NO.		REV
RBT18625		11
MAT'L		UNLESS OTHERWISE SPECIFIED
HEAT TREAT		DIMENSIONS ARE IN INCHES
FINISH		.XXX ± .005 FRACTIONS ± 1/8
SPEC		.XX ± .01 ANGLES ± 5°
DRAWN BY:		.X ± .1 SURFACES = 125°
CHECKED:		1. BREAK ALL SHARP EDGES
OPPS APPR:		.015 x 45° OR .015R
QA APPR:		2. DIMENSIONAL LIMITS APPLY
APPROVED:		AFTER PLATING
SCALE		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
1:16		USED ON MODEL
DATE		MD-500
8/11/2004		
SHEET		5 OF 74

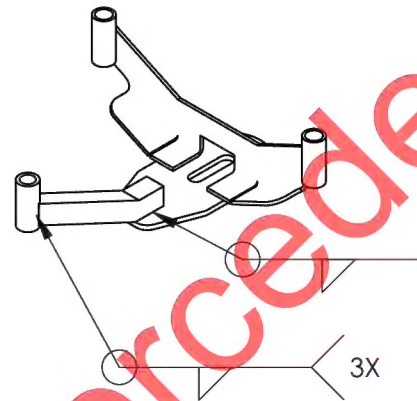
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REVISIONS				DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION				
11	15-0361	-2 CH'D DRAWING TO SHEET METAL TOLERANCE.		11/16/2015	RJC	JAG

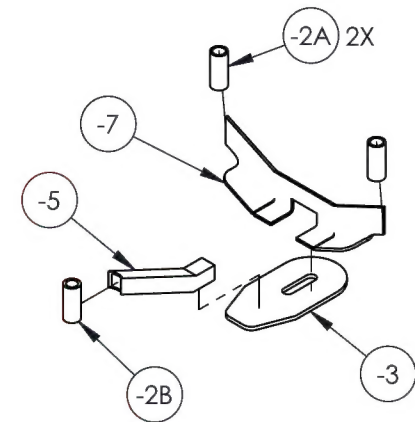
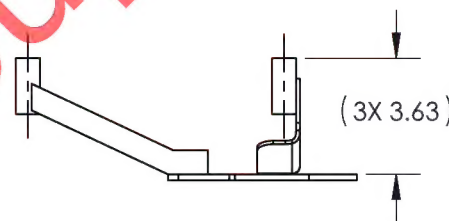


(-2)

TRANSMISSION ADAPTER



Supercircled



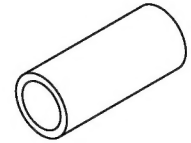
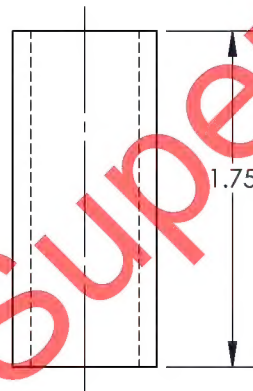
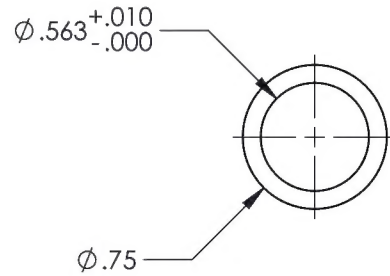
NOTE:  
USE WELD FIXTURE RBT18625-2F TO POSITION FOR WELDING.

<b>DART AEROSPACE</b>	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-2</b>	REV <b>11</b>
MAT'L TREAT FINISH POWDER COAT BLACK SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: <b>COLE</b>	USED ON MODEL
CHECKED: <b>DUERFELDT</b>	<b>MD-500</b>
OPPS APPR: <b>ANDERSON</b>	
QA APPR: <b>LINDSAY</b>	
APPROVED: <b>GILBERT</b>	
SCALE <b>1:6</b>	DATE <b>8/11/2004</b>
SHEET 6 OF 74	



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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



Superseded

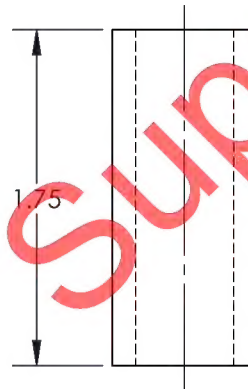
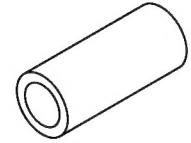
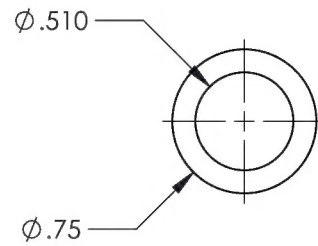
(-2A)

ATTACH TUBE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-2A	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -2	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	SHEET 7 OF 74

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(-2B)

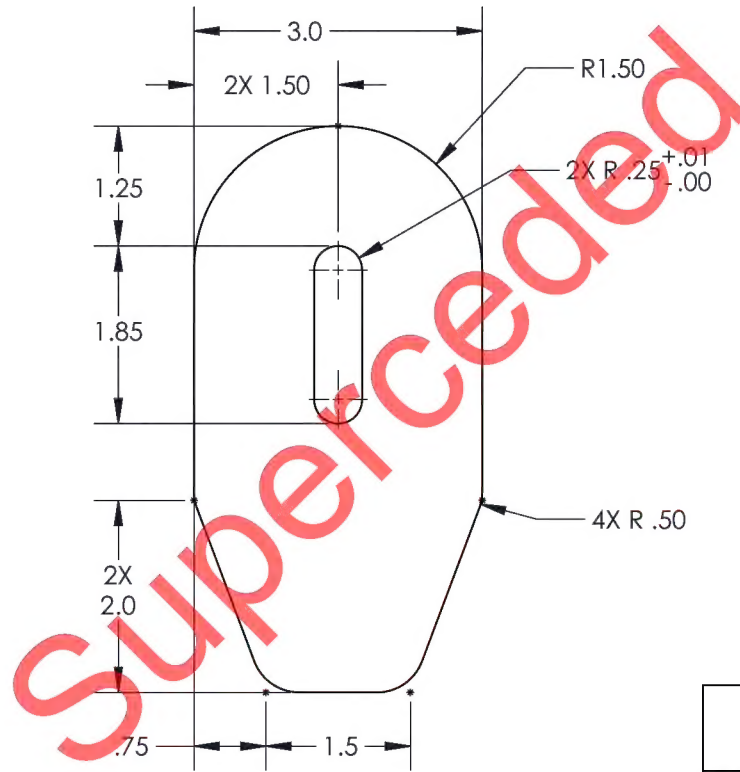
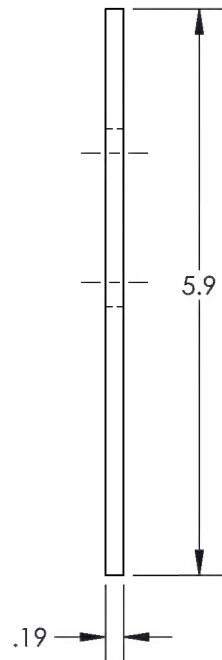
ATTACH TUBE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-2B	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -2	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:1	DATE 8/11/2004
	SHEET 8 OF 74



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-3 CH'D DIM WAS 2X R.25 IS 2X R.25 +.01-.00, CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



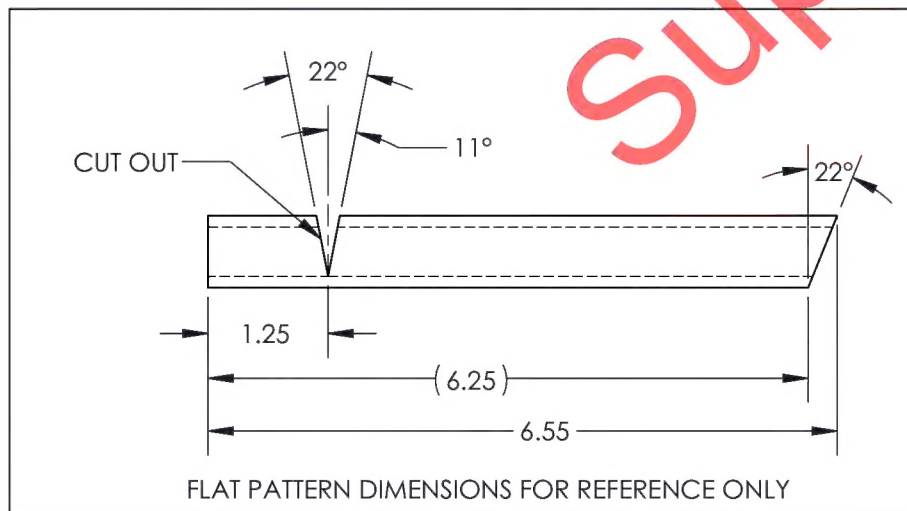
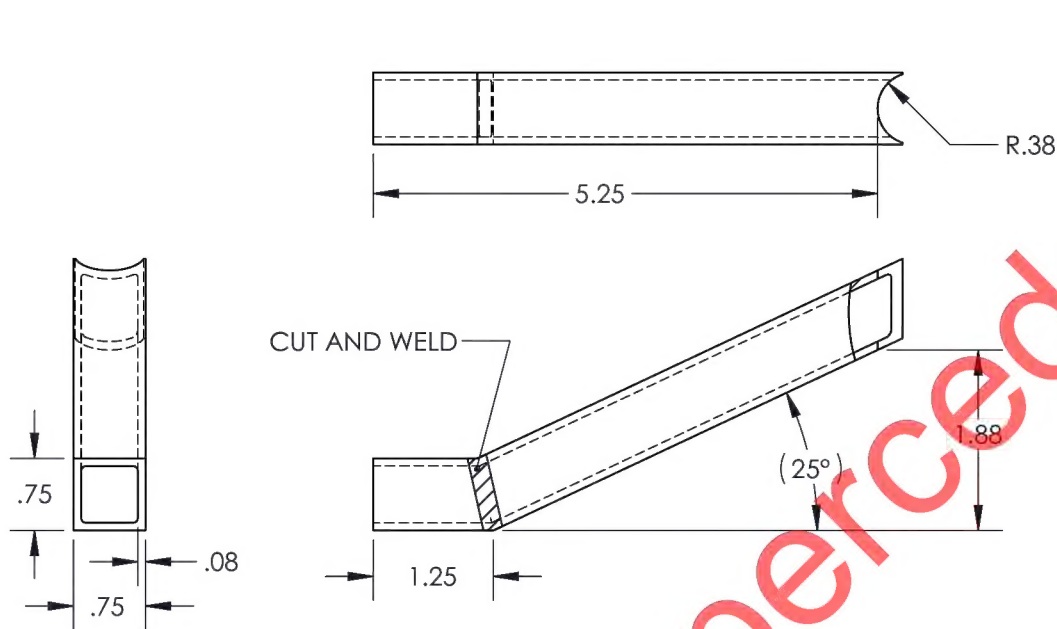
(-3)

ATTACH PLATE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-3	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -2	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:2	DATE 8/11/2004
	SHEET 9 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-5 CH'D DRAWING TO SHEET METAL TOLERANCE, ADDED MISSING DIM'S (25°), .75 AND .08, DELETED ONE 22° CUT OUT FROM FLAT PATTERN.	11/16/2015	RJC	JAG

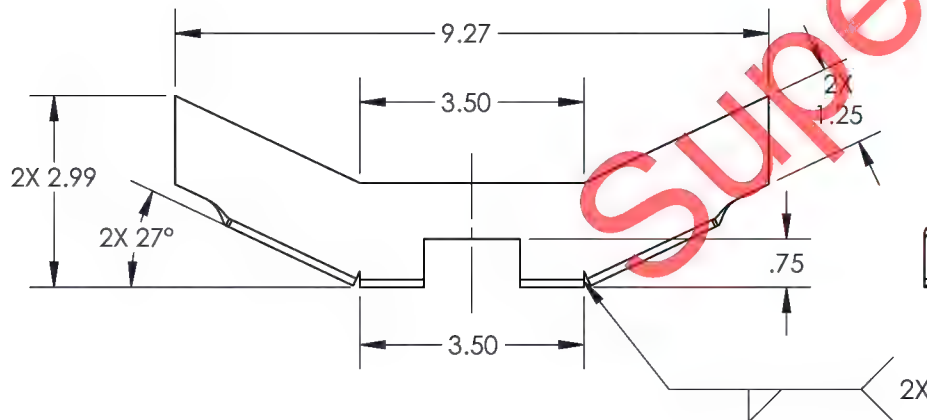
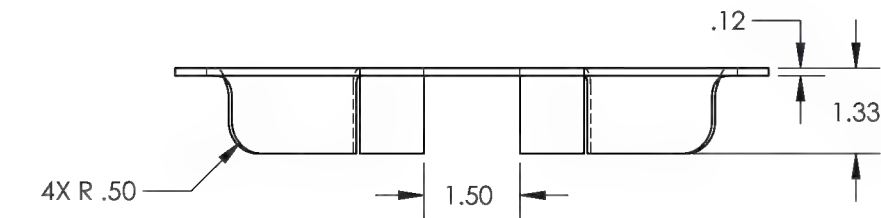


(5)  
BRACKET

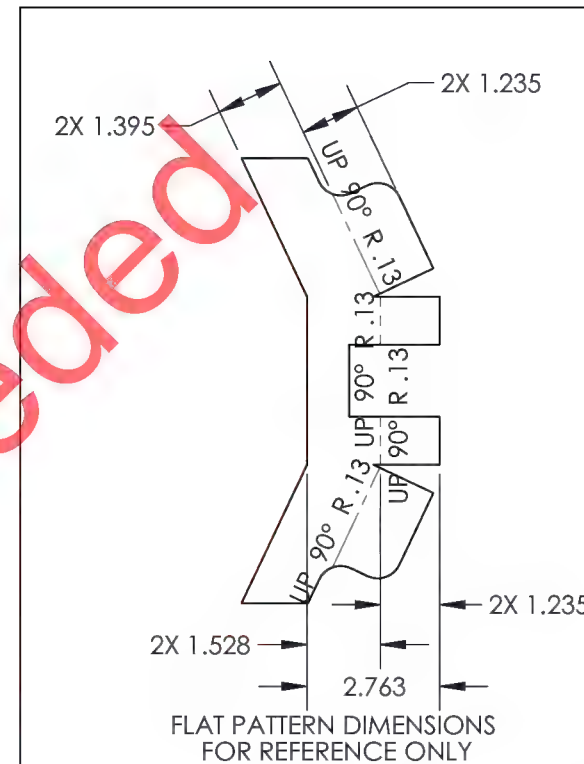
<b>DART AEROSPACE</b>	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-5</b>	REV <b>11</b>
MAT'L STEEL TUBE HEAT TREAT FINISH SEE -2 SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL <b>MD-500</b>	
SCALE 1:2	DATE 8/11/2004
SHEET 10 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-7 CH'D DRAWING TO SHEET METAL TOLERANCE, ADDED REFERENCE FLAT PATTERN, CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR.	11/16/2015	RJC	JAG



(-7)  
WING BRACKET



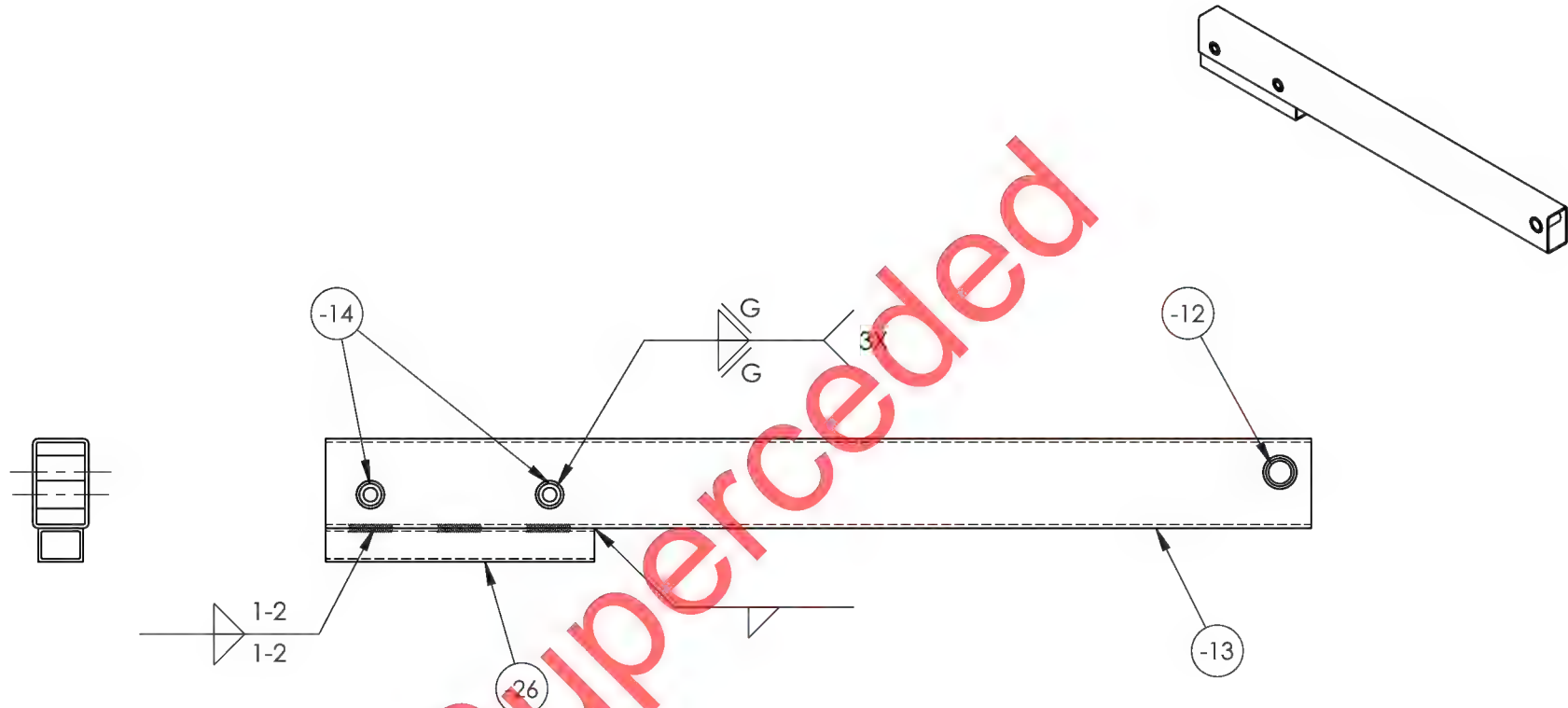
MIN RADIUS

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-7	REV 11
MAT'L A36/1018/1020 HR	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
FEAT TREAT FINISH SEE -2	.XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
SPEC 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	MD-500
APPROVED: GILBERT	
SCALE 1:3	DATE 8/11/2004
SHEET 11 OF 74	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-8 CH'D DRAWING TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG

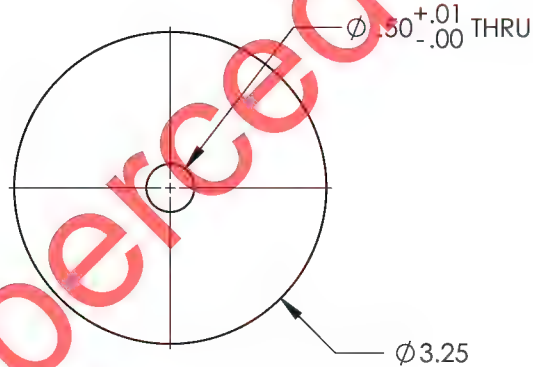
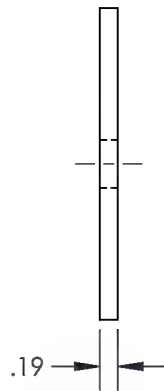
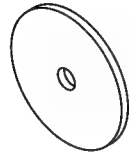


(8)  
TRANSMISSION ADAPTER TUBE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-8	REV 11
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	MD-500
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:4	DATE 8/11/2004
SHEET 12 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-9 CH'D DIM WAS Ø.50 THRU ALL IS Ø.50 +.01-.00 THRU, CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



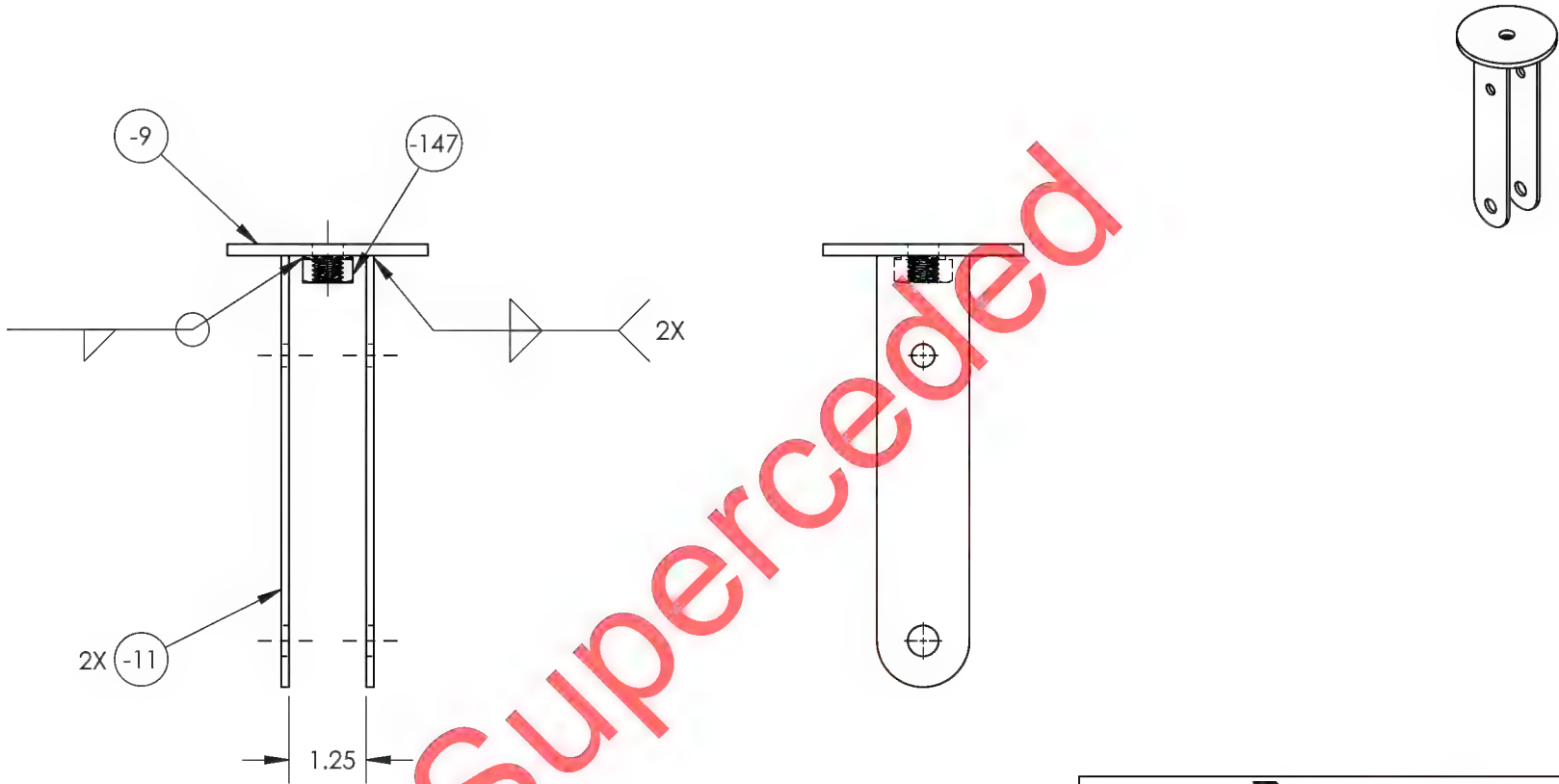
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⑨  
DISK

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-9	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -10	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:2	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 13 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-10 CH'D DRAWING TO SHEET METAL TOLERANCE, ADDED P/N -147 FOR WELD NUT.	11/16/2015	RJC	JAG



Superseded

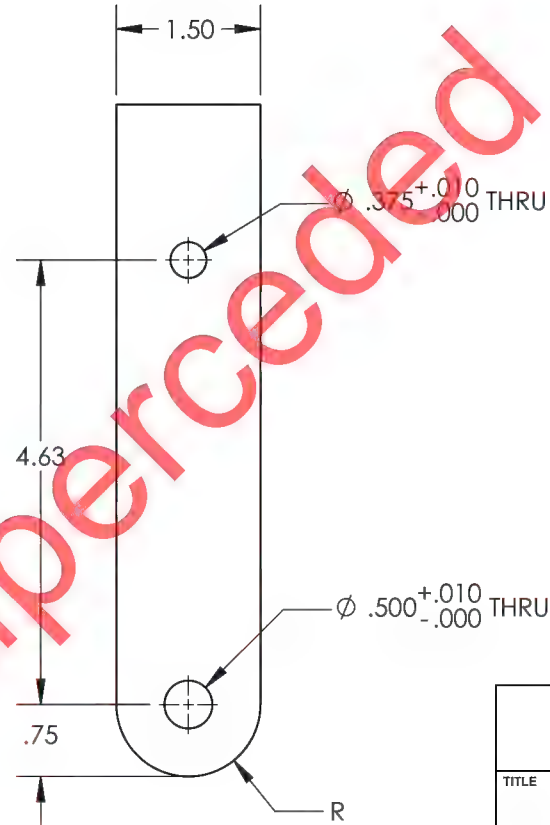
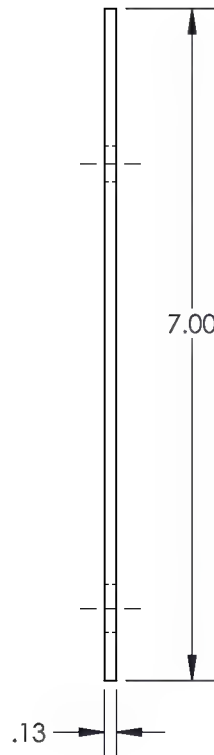
-10  
TRANSMISSION ADAPTER PIVOT

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-10	REV 11
MAT'L TREAT FINISH POWDER COAT BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	MD-500
APPROVED: GILBERT	
SCALE 1:3	DATE 8/11/2004
SHEET 14 OF 74	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-11 CH'D DRAWING TO SHEET METAL TOLERANCE, CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, CH'D DIM WAS Ø.375 THRU ALL IS Ø.375 +.010-.000 THRU, WAS Ø.500 THRU ALL IS Ø.500 +.010-.000 THRU.	11/16/2015	RJC	JAG



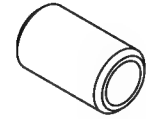
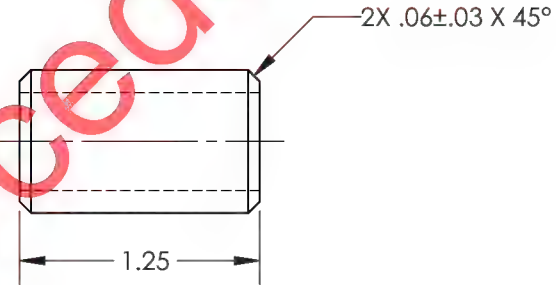
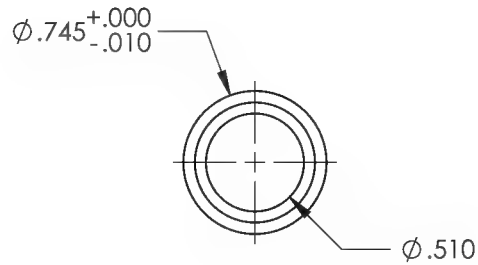
(11)

STRAP

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-11	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH SEE -10	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:2	DATE 8/11/2004
SHEET 15 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-12 CH'D DIM WAS (Ø.750) IS Ø.745 +.000-.010, WAS (Ø.510) IS Ø.510, CH'D MATERIAL WAS CDS IS 1018/1020 CR, ADDED 2X .06 ±.03 X 45°.	11/16/2015	RJC	JAG



Superceded

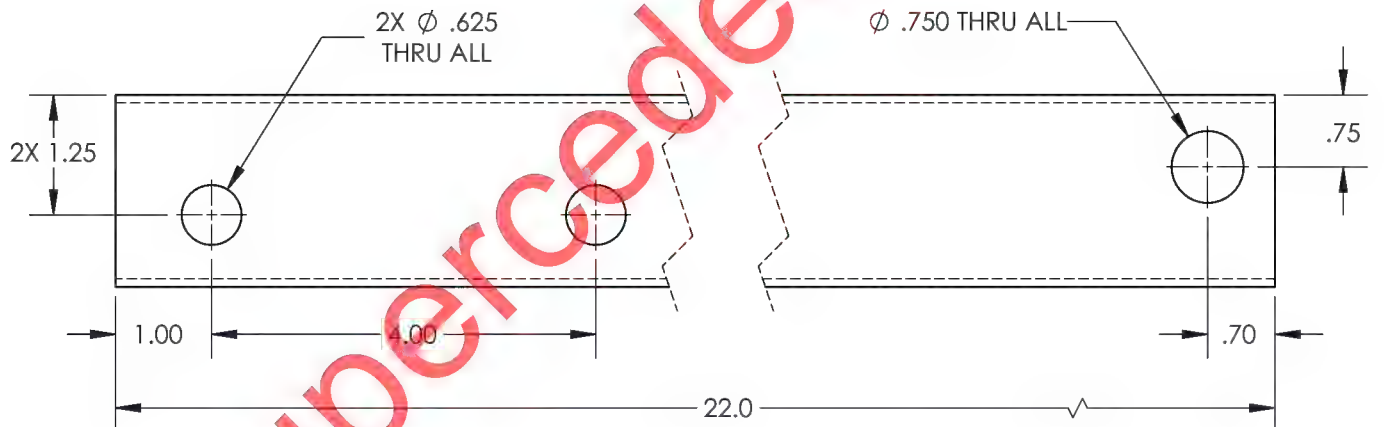
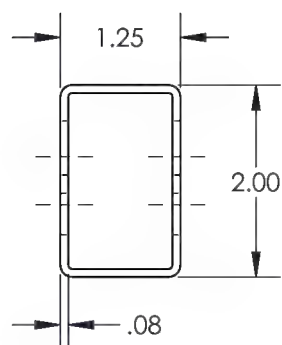
(-12)

BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-12	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -8	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
SHEET 16 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-13 CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



TITLE		MD-500 ENGINE LIFT	
DWG NO.		RBT18625-13	
		REV	11
MAT'L STEEL TUBE		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH SEE -8		.XXX ± .010 FRACTIONS ± 1/8	
SPEC		.XX ± .03 ANGLES ± 1°	
DRAWN BY: COLE		.X ± .1 SURFACES = 125°	
CHECKED: DUERFELDT		1. BREAK ALL SHARP EDGES	
OPPS APPR: ANDERSON		.015 x 45° OR .015R	
QA APPR: LINDSAY		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
APPROVED: GILBERT		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SCALE 1:2		DATE 8/11/2004	
		SHEET 17 OF 74	

(13)

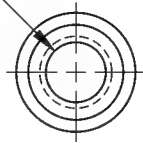
ADAPTER TUBE



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-14 CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DIM WAS (Ø.625) IS Ø.620 +.000-.010.	11/16/2015	RJC	JAG

3/8-16 UNC - 2B  
THRU ALL



Ø.620<sup>+.000</sup><sub>-.010</sub>

1.25

2X .06±.03 X 45°



Supercoded

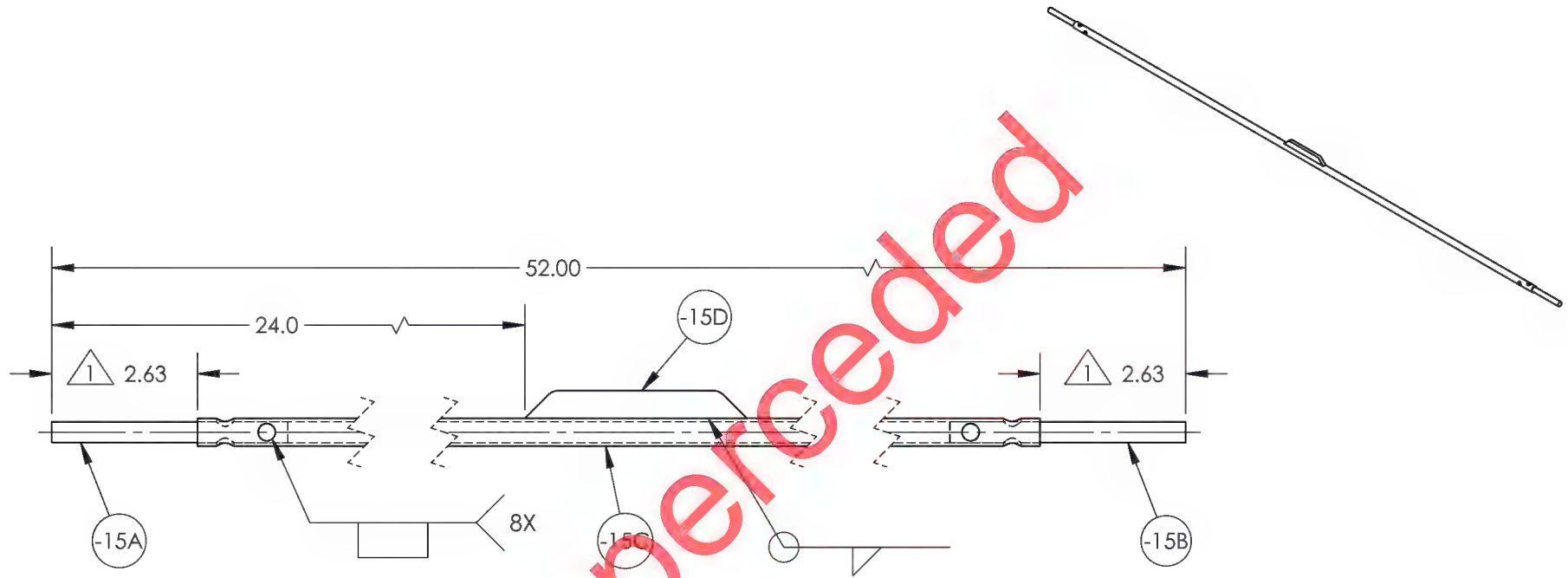
(-14)

THREADED BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-14	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -8 & -28	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± 5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 18 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-15 TIE-ROD STRETCHED TO MATCH REVISED TRANSMISSION ADAPTER.	6/11/2003		
9		-15 CH'D OVERALL LENGTH FROM 52.25 PER G.E.	1/18/2012	RJC	RW
11	15-0361	-15 CH'D DRAWING TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



NOTE:

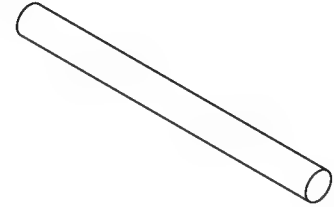
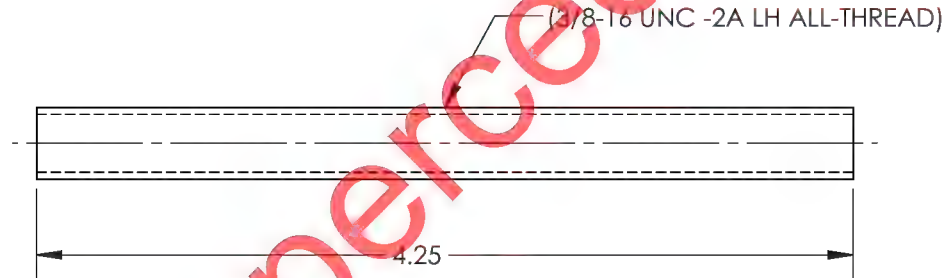
1 MASK THREADS PRIOR TO POWDER COATING.

-15  
TIE-ROD ASSEMBLY

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-15	REV 11
MAT'L HEAT TREAT FINISH POWDER COAT BLACK SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL MD-500	
SCALE 1:3	DATE 8/11/2004
SHEET 19 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED



Supercoded

-15A

LH THREAD

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-15A	REV 11
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -15	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ±.5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125/
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	DATE 8/11/2004
SHEET 20 OF 74	



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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



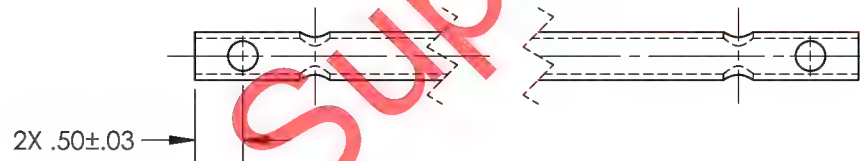
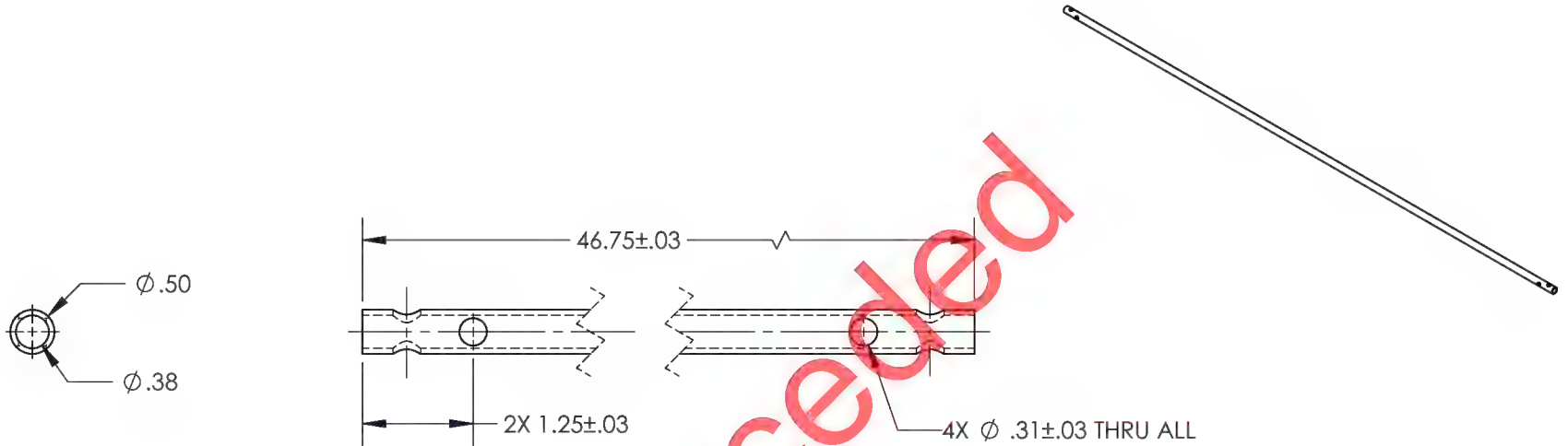
(-15B)

RH THREAD

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-15B	REV 11
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -15	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ±.5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	SHEET 21 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4		-15C TUBE WALL INCREASED FROM .049 TO .063	9/11/2004		
11	15-0361	-15C ADDED MISSING DIMS Ø.50 AND .38, CH'D DIM WAS 46.75 IS 46.75 ±.03, WAS 4X Ø.31 THRU ALL IS 4X .31 ±.03 THRU ALL, WAS 2X .50 IS 2X .50 ±.03.	11/16/2015	RJC	JAG



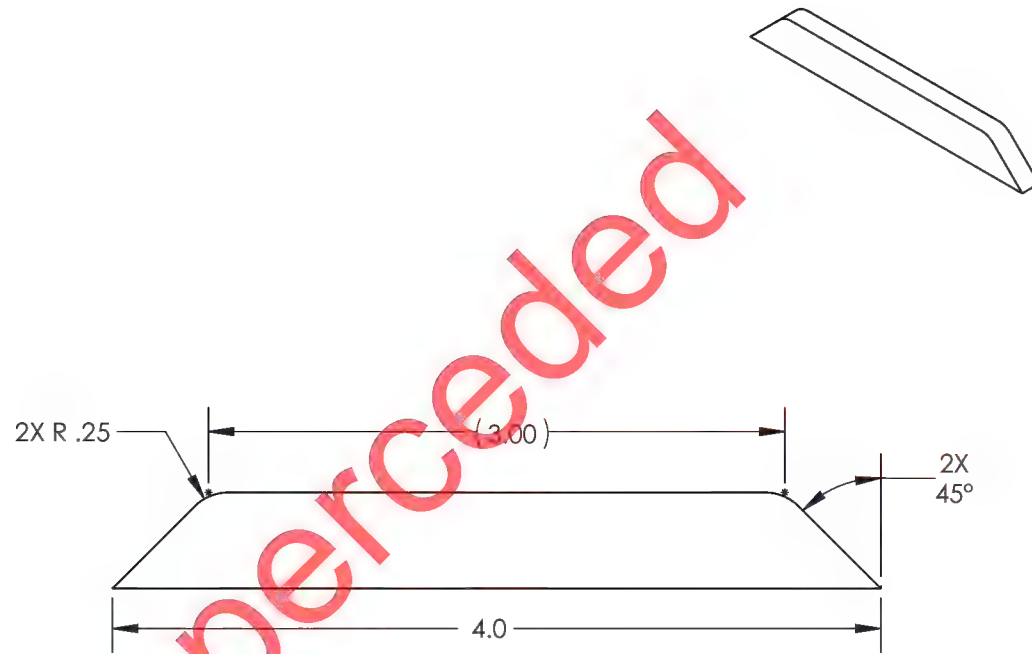
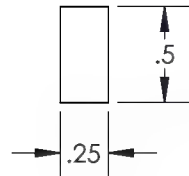
-15C

TIE-ROD TUBE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-15C	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -15	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± 5°
	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 22 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-15D ADDED PART.	9/17/2013	JAG	
11	15-0361	-15D CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



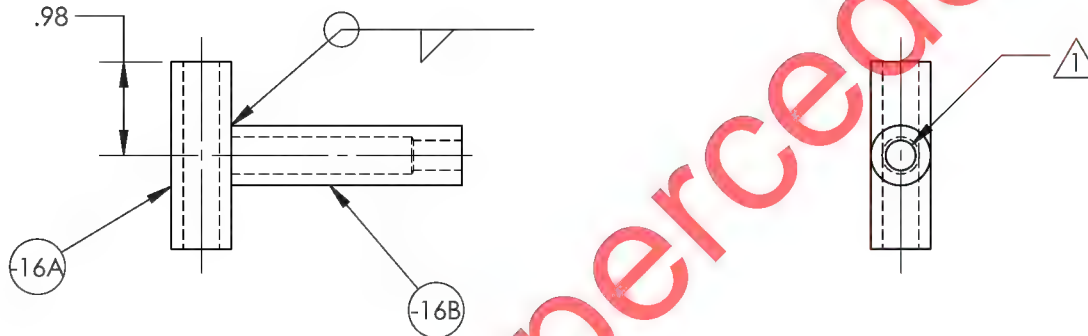
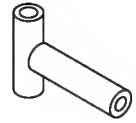
(-15D)

TAB

<b>DART AEROSPACE</b>																									
TITLE <b>MD-500 ENGINE LIFT</b>																									
DWG NO. <b>RBT18625-15D</b>	REV <b>11</b>																								
<table border="0"> <tr> <td>MAT'L 1018/1020 CR</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH SEE -15</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>SPEC</td> <td>.XX ± .01 ANGLES ± .5°</td> </tr> <tr> <td></td> <td>.X ± .1 SURFACES = 125° ✓</td> </tr> <tr> <td>DRAWN BY: GILBERT</td> <td>1. BREAK ALL SHARP EDGES</td> </tr> <tr> <td>CHECKED: DUERFELDT</td> <td>.015 x 45° OR .015R</td> </tr> <tr> <td>OPPS APPR: ANDERSON</td> <td>2. DIMENSIONAL LIMITS APPLY</td> </tr> <tr> <td>QA APPR: LINDSAY</td> <td>AFTER PLATING</td> </tr> <tr> <td>APPROVED: GILBERT</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>SCALE 1:1</td> <td>DATE 9/4/2013</td> </tr> <tr> <td></td> <td>SHEET 23 OF 74</td> </tr> </table>		MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED	HEAT TREAT	DIMENSIONS ARE IN INCHES	FINISH SEE -15	.XXX ± .005 FRACTIONS ± 1/8	SPEC	.XX ± .01 ANGLES ± .5°		.X ± .1 SURFACES = 125° ✓	DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES	CHECKED: DUERFELDT	.015 x 45° OR .015R	OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY	QA APPR: LINDSAY	AFTER PLATING	APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	SCALE 1:1	DATE 9/4/2013		SHEET 23 OF 74
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED																								
HEAT TREAT	DIMENSIONS ARE IN INCHES																								
FINISH SEE -15	.XXX ± .005 FRACTIONS ± 1/8																								
SPEC	.XX ± .01 ANGLES ± .5°																								
	.X ± .1 SURFACES = 125° ✓																								
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES																								
CHECKED: DUERFELDT	.015 x 45° OR .015R																								
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY																								
QA APPR: LINDSAY	AFTER PLATING																								
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																								
SCALE 1:1	DATE 9/4/2013																								
	SHEET 23 OF 74																								

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-16 CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superseded

NOTE:

1 MASK THREADS PRIOR TO POWDER COATING.

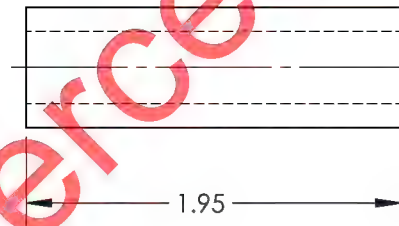
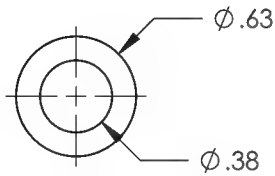
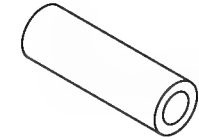
-16

LH BUSHING ASSEMBLY

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-16	REV 11
MAT'L REPT TREAT FINISH POWDER COAT BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125/
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	MD-500
APPROVED: GILBERT	
SCALE 1:2	DATE 8/11/2004
SHEET 24 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-16A CH'D MATERIAL WAS 1018 IS CDS.	11/16/2015	RJC	JAG



Superceded

-16A

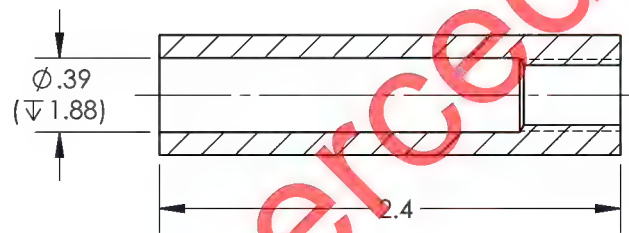
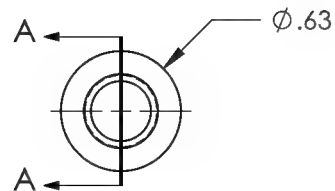
EYE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-16A	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
FEAT	DIMENSIONS ARE IN INCHES
TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH SEE -16	.XX ± .01 ANGLES ±.5°
SPEC	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
SCALE 1:1	ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 25 OF 74	MD-500



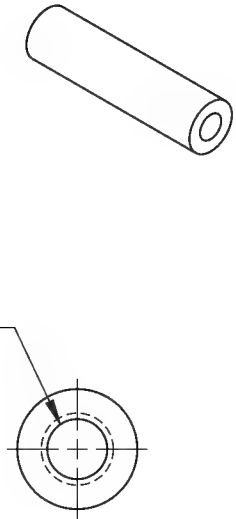
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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-16B CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



SECTION A-A

3/8-16 UNC -2B LH  $\nabla .50$



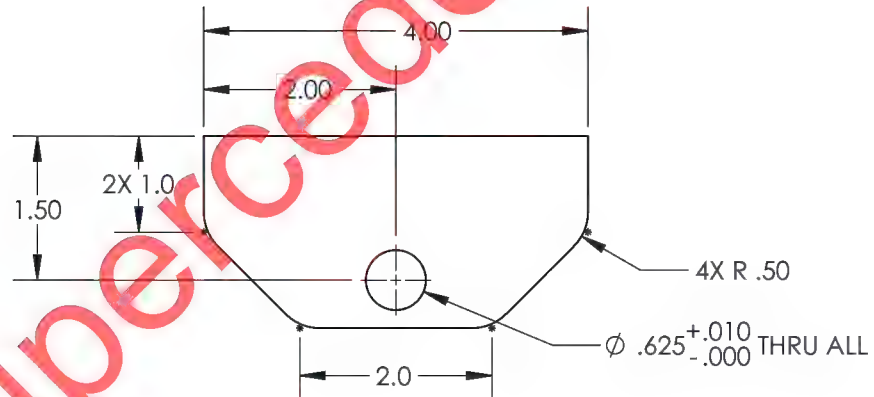
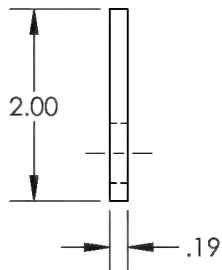
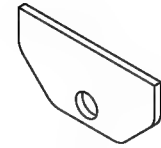
-16B

LH THREAD BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-16B	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -16	.XXX $\pm$ .010 FRACTIONS $\pm$ 1/8
SPEC	.XX $\pm$ .03 ANGLES $\pm$ 1°
DRAWN BY: COLE	.X $\pm$ .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 26 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-17 CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, CH'D DIM WAS Ø.625 THRU ALL IS Ø.625 +.010-.000 THRU ALL, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superseded

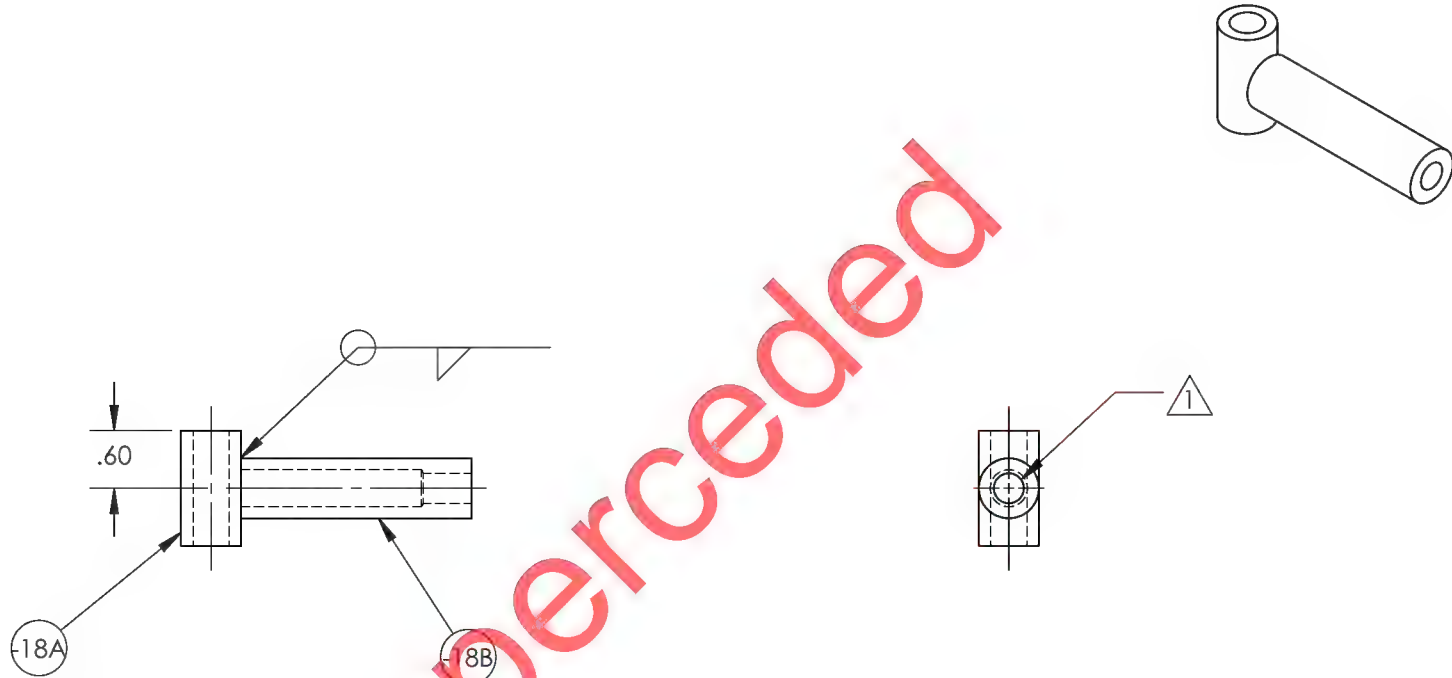
(-17)

RAM ATTACH

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-17	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -24	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:2	DATE 8/11/2004
	SHEET 27 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-18 CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



NOTE:

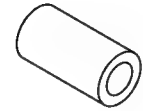
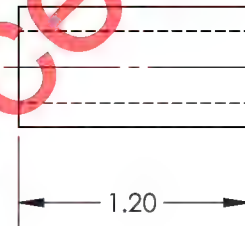
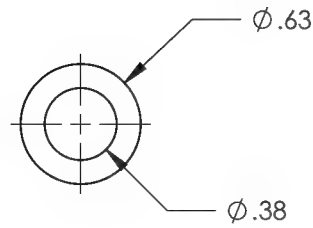
1 MASK THREADS PRIOR TO POWDER COATING.

-18  
RH BUSHING ASSEMBLY

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-18	REV 11
MAT'L TREAT FINISH POWDER COAT BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	MD-500
APPROVED: GILBERT	
SCALE 1:2	DATE 8/11/2004
SHEET 28 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-18A CH'D MATERIAL WAS 1018 IS CDS.	11/16/2015	RJC	JAG



Superceded

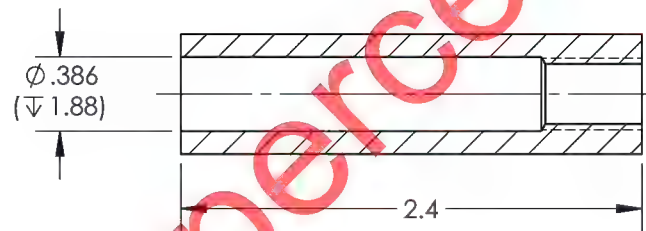
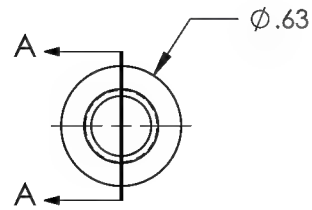
-18A

EYE

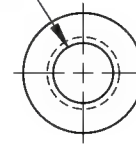
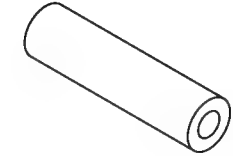
<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-18A	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -18	.XXX $\pm$ .005 FRACTIONS $\pm$ 1/8
SPEC	.XX $\pm$ .01 ANGLES $\pm$ .5°
DRAWN BY: COLE	.X $\pm$ .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 29 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-18B CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



3/8-16 UNC -2B  $\nabla .50$



SECTION A-A

(-18B)

RH THREAD BUSHING

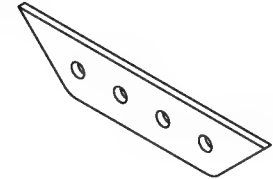
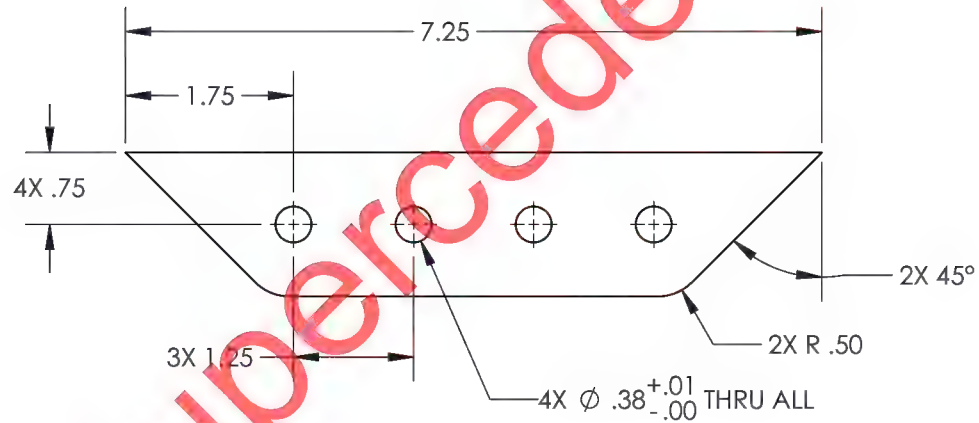
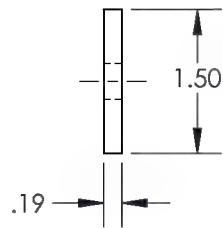


TITLE		MD-500 ENGINE LIFT	
DWG NO.		RBT18625-18B	
REV		11	
MAT'L 1018/1020 CR		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH SEE -18		.XXX $\pm$ .005 FRACTIONS $\pm$ 1/8	
SPEC		.XX $\pm$ .01 ANGLES $\pm$ 5°	
DRAWN BY: COLE		.X $\pm$ .1 SURFACES = 125	
CHECKED: DUERFELDT		1. BREAK ALL SHARP EDGES	
OPPS APPR: ANDERSON		.015 x 45° OR .015R	
QA APPR: LINDSAY		2. DIMENSIONAL LIMITS APPLY	
APPROVED: GILBERT		AFTER PLATING	
SCALE 1:1		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DATE 8/11/2004		USED ON MODEL	
SHEET 30 OF 74		MD-500	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-19 CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, CH'D DIM WAS 4X Ø.38 THRU ALL IS 4X Ø.38 +.01-.00 THRU, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG

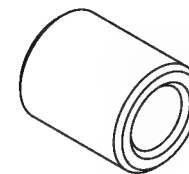
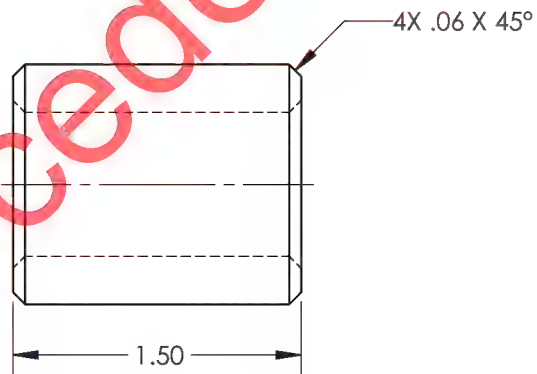
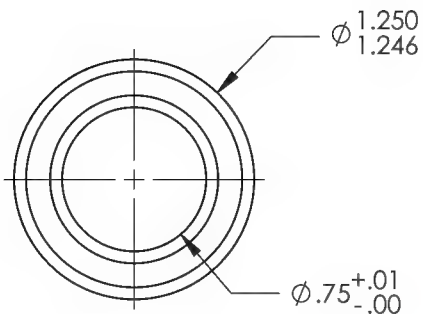


(-19)  
TURNBUCKLE ATTACH

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-19	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH SEE -24	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:2	DATE 8/11/2004
SHEET 31 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-21 CH'D DIM WAS (Ø .75) IS Ø.75 +.01-00, WAS (Ø1.250) IS Ø1.250-1.246, CH'D MATERIAL WAS CDS IS DOM.	11/16/2015	RJC	JAG



Supercircled

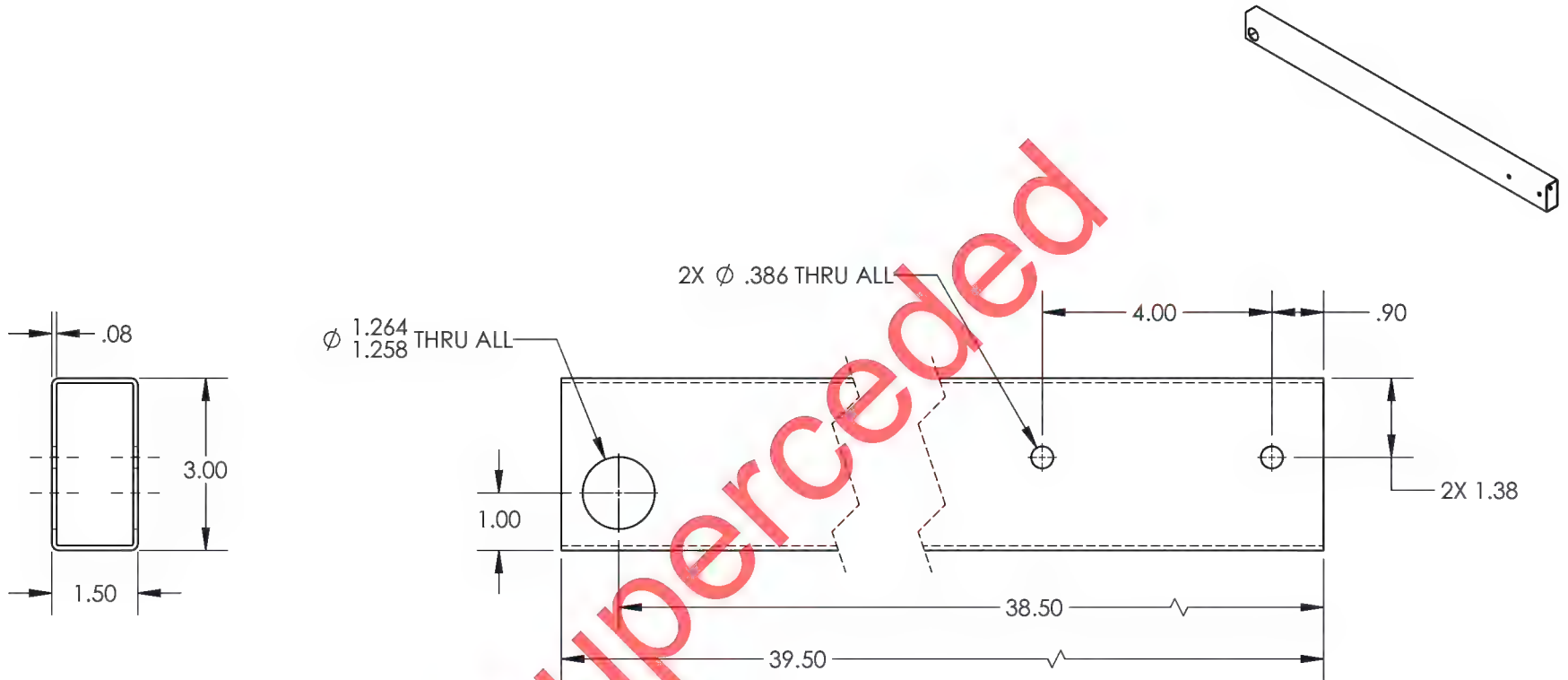
(-21)

BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-21	REV 11
MAT'L DOM REAT TREAT FINISH SEE -24 SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:1	DATE 8/11/2004
SHEET 32 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-23 ADDED MISSING DIM .08, CH'D DIM WAS Ø1.25 THRU ALL IS Ø1.264-1.258 THRU ALL, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE,	11/16/2015	RJC	JAG



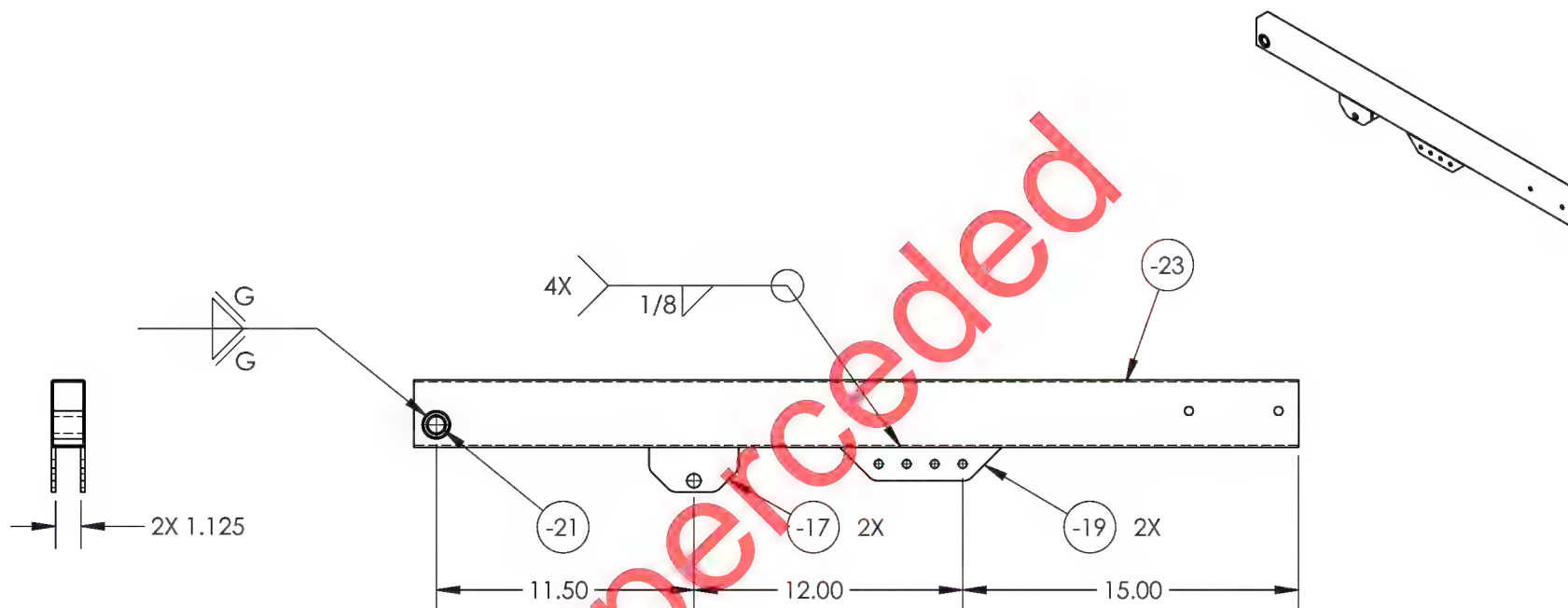
(-23)

BOOM

<b>DART AEROSPACE</b>	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-23</b>	REV <b>11</b>
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -24	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:3	DATE 8/11/2004
USED ON MODEL <b>MD-500</b>	
SHEET 33 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9		-24 CH'D HOLE LOCATION DIM FROM 11.50 TO 12.00 & 15.50 TO 15.00, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	1/18/2012	RJC	RW
11	15-0361	-24 CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG

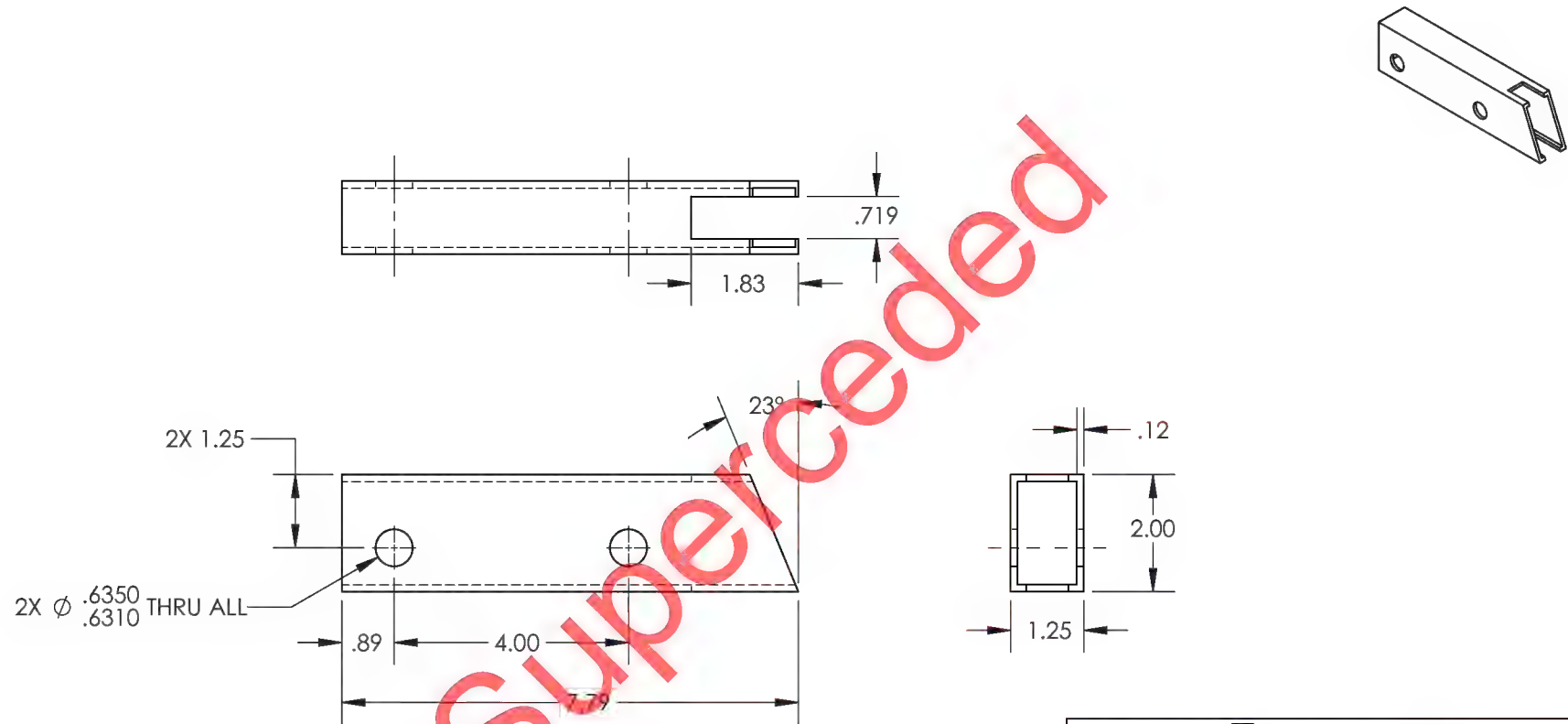


(-24)  
BOOM ASSEMBLY

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-24	REV 11
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:8	DATE 8/11/2004
SHEET 34 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
7		-25 CH'D WALL FROM .083.	10/1/2009	WP	
11	15-0361	-25 ADDED MISSING DIM .12. CH'D DIMS WAS (1.250) IS 1.25, WAS (2.000) IS 2.00, WAS 2X Ø.625 THRU ALL IS 2X Ø.6310-.6350 THRU ALL. WAS 68° IS 23°, DELETED DIMS (1.00) AND (.696), CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



(-25)

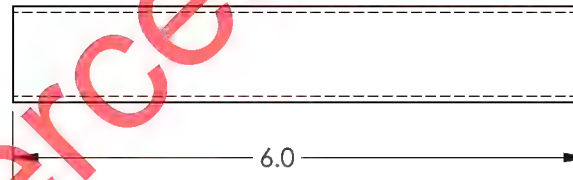
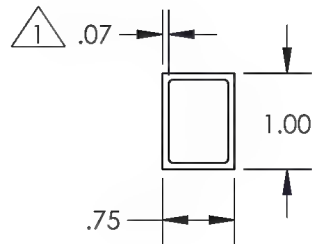
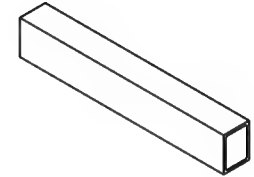
ENGINE ADAPTER TUBE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-25	REV 11
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -28	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:3	DATE 8/11/2004
	SHEET 35 OF 74



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-26 ADDED MISSING DIM .07, ADDED NOTE 1, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superceded

NOTE:

1 MAY BE SUBSTITUTED WITH .08 WALL THICKNESS.

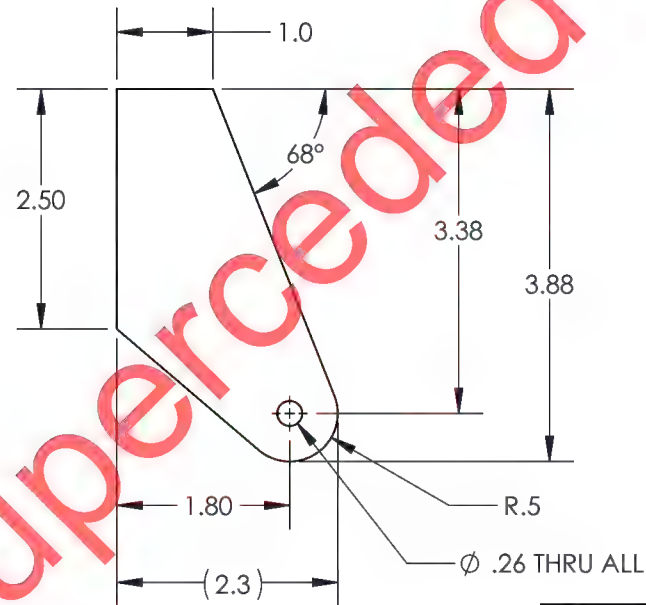
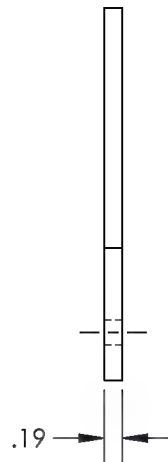
(-26)

TUBE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-26	REV 11
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -8 & -28	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 36 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-27 CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superceded

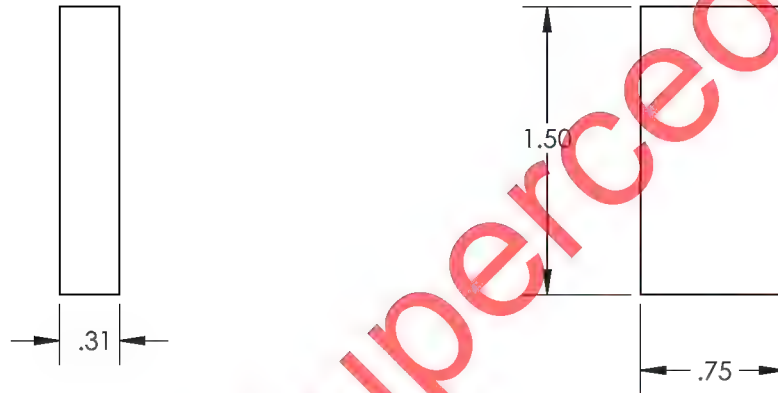
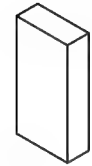
(-27)

ENGINE ATTACH

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-27	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -28	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:2	DATE 8/11/2004
	SHEET 37 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		-27A ADDED SPACER.	7/7/2009	RJC	
11	15-0361	-27A CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



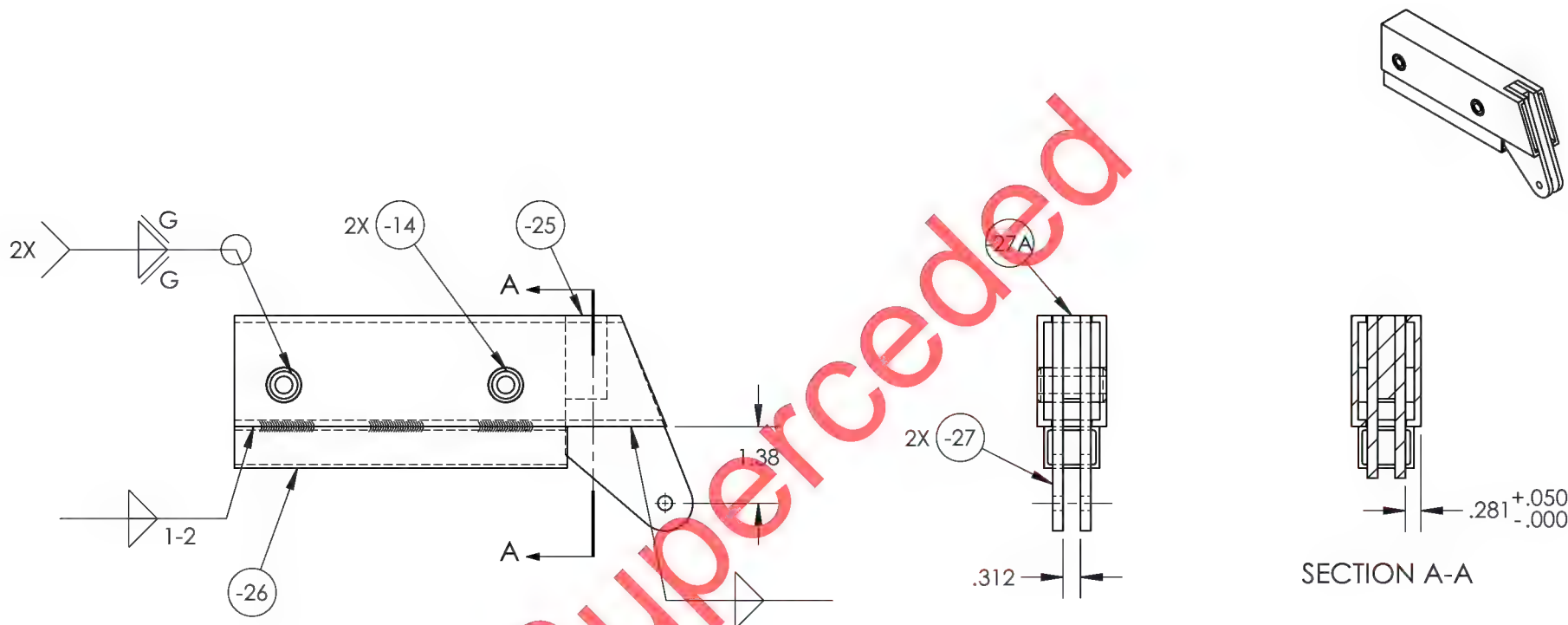
(-27A)

SPACER

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-27A	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -28	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	USED ON MODEL MD-500
	SHEET 38 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		-28 ADDED SPACER -27A.	7/7/2009	WP	
10		-28 CORRECTED DIM FROM .313 TO .281.	9/17/2013	RJC	
11	15-0361	-28 CH'D DRAWING TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



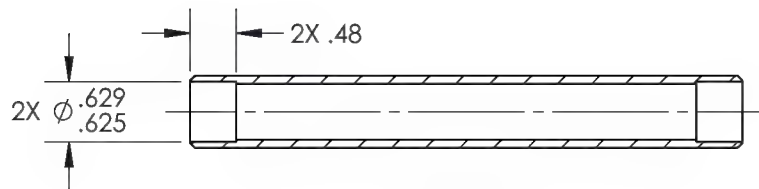
SECTION A-A

ENGINE ADAPTER ASSEMBLY

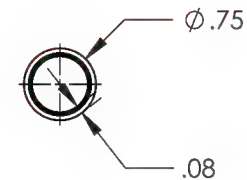
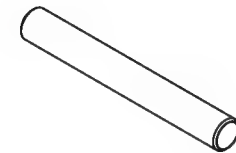
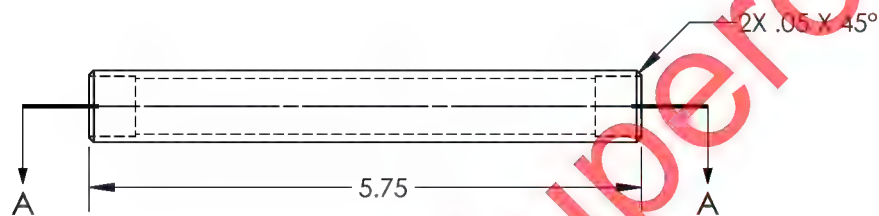
<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-28	REV 11
MAT'L HEAT TREAT FINISH POWDER COAT BLACK SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	MD-500
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:3	DATE 8/11/2004
SHEET 39 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-29 CH'D DIM WAS Ø.63 IS .08 WALL THICKNESS, ADDED DIM 2X .625-.629 AND 2X .48.	11/16/2015	RJC	JAG



SECTION A-A



(-29)

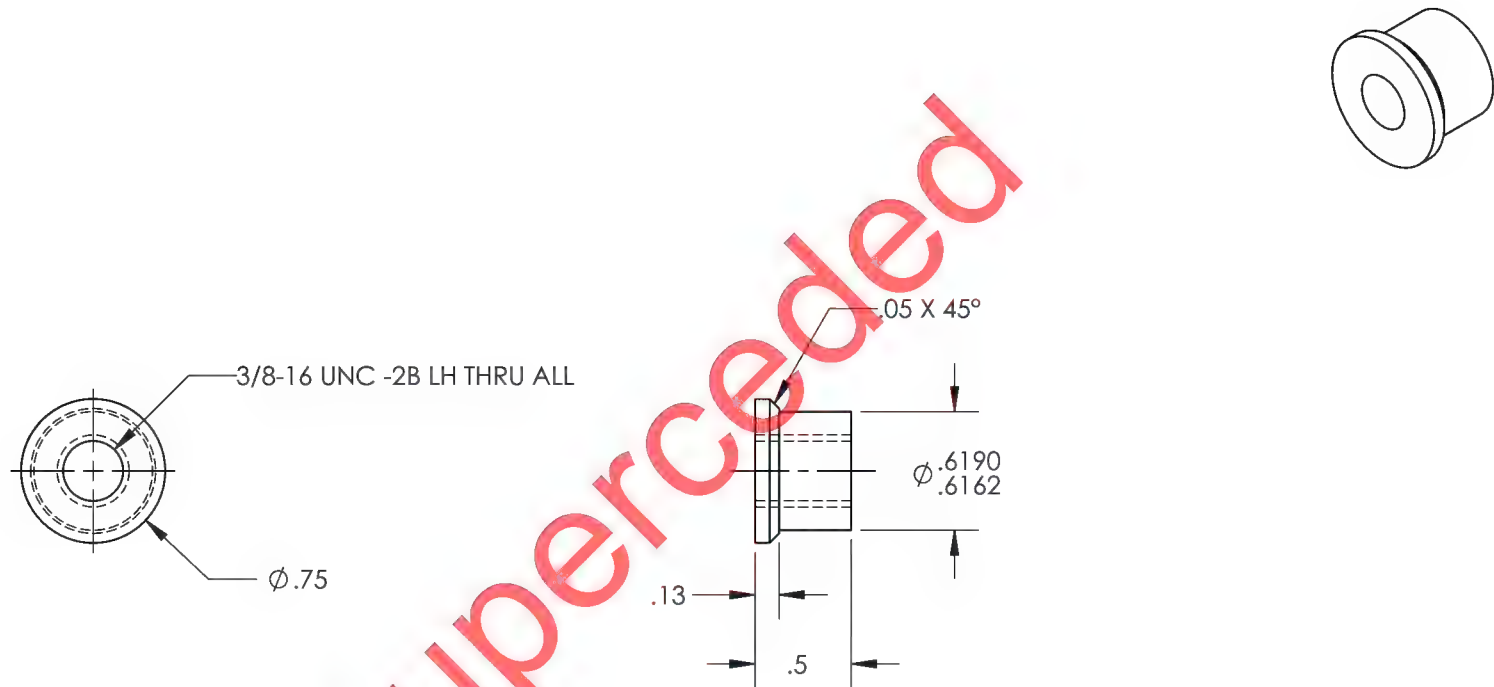
TUBE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-29	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 40 OF 74



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-31 CH'D Ø.62 TO REFERENCE DIM.	9/17/2013	JAG	
11	15-0361	-31 CH'D MATERIAL WAS 1018 IS 1018/1020 CR. CH'D DIM WAS (Ø.620) IS Ø.6190-.6162.	11/16/2015	RJC	JAG



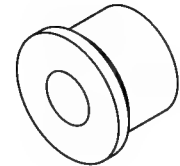
(-31)

LH THREADED BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-31	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43 & -51	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± 5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 41 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-33 CH'D Ø.638 TO REFERENCE DIM. OF .62	9/17/2013	JAG	
11	15-0361	-33 CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DIM WAS (Ø.620) IS Ø.6190-.6162.	11/16/2015	RJC	JAG

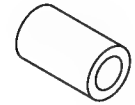


(-33)  
THREADED BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-33	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43 & -51	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± 5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	SHEET 42 OF 74

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



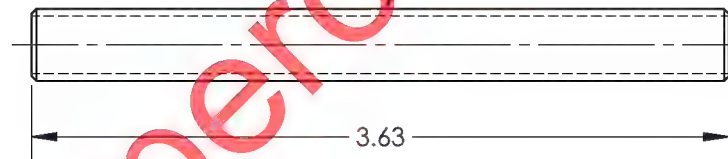
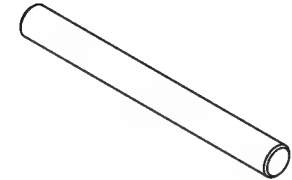
(-35)

EYE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-35	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43 & -51	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	SHEET 43 OF 74

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(3/8-16 UNC -2A LH THREADS)

LH THREADED STUD

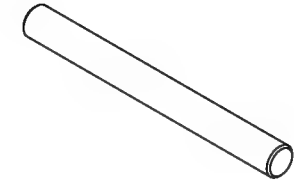
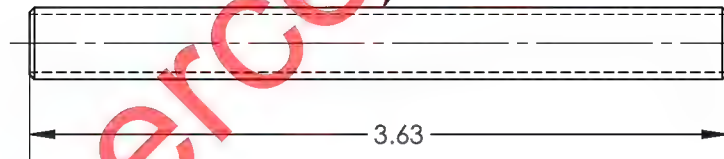
(-37)



TITLE		MD-500 ENGINE LIFT	
DWG NO.		RBT18625-37	REV 11
MAT'L STEEL		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH SEE -43		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ±.5°	
DRAWN BY: COLE		.X ± .1 SURFACES = 125°	
CHECKED: DUERFELDT		1. BREAK ALL SHARP EDGES	
OPPS APPR: ANDERSON		.015 x 45° OR .015R	
QA APPR: LINDSAY		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
APPROVED: GILBERT		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SCALE 1:1		DATE 8/11/2004	
		SHEET 44 OF 74	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



Superceded

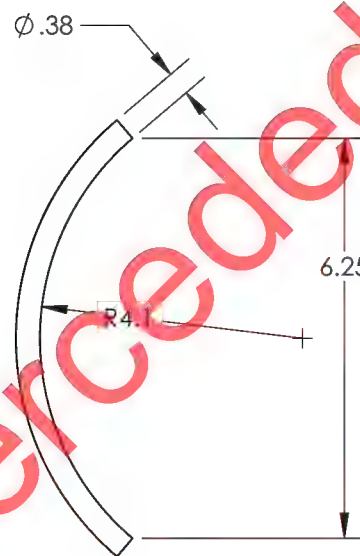
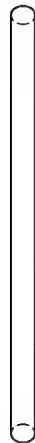
(-39)

THREADED STUD

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-39	REV 11
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	SHEET 45 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-41 CH'D DRAWING TO SHEET METAL TOLERANCE, CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



(-41)

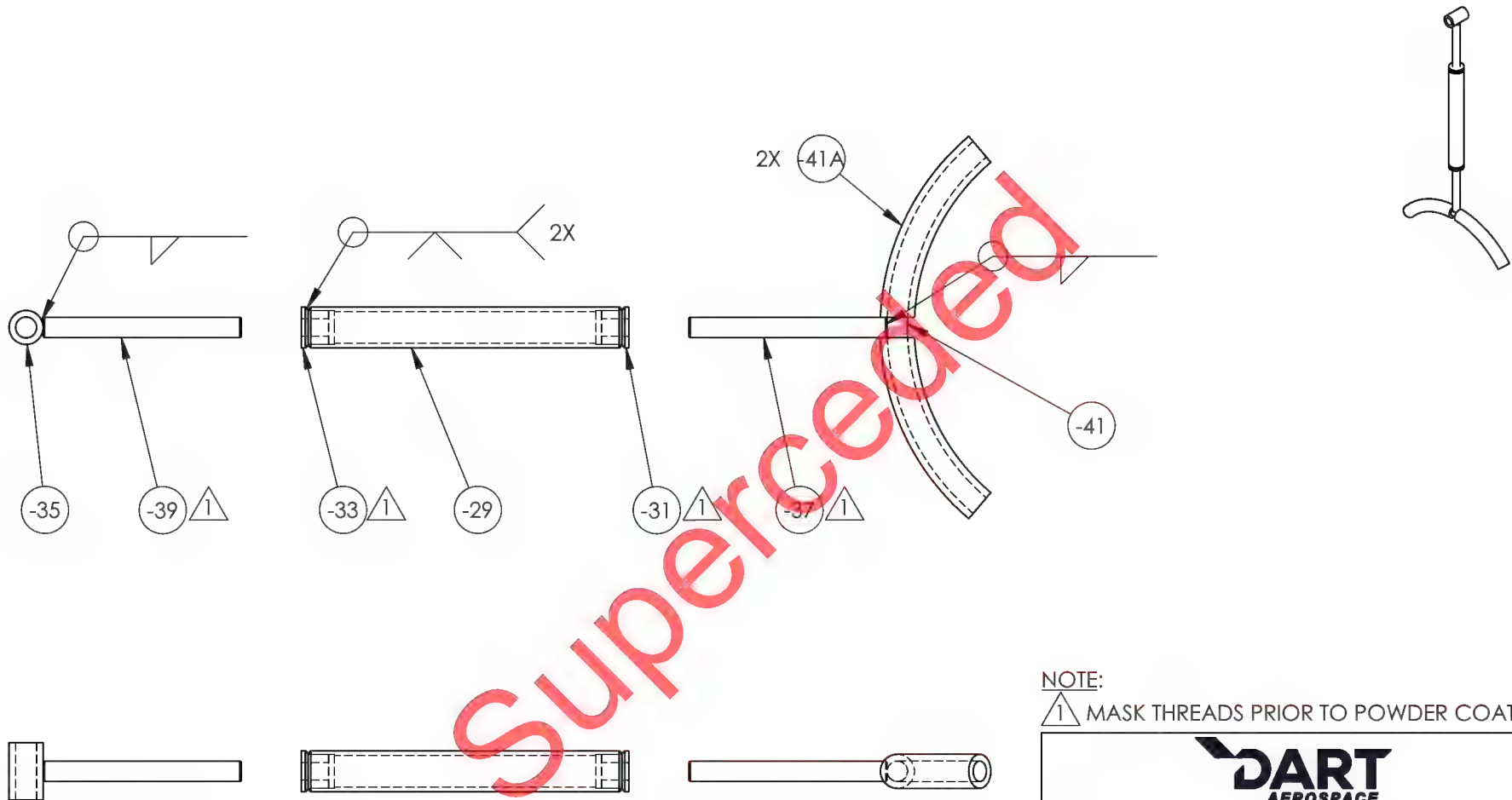
ARCH

<b>DART AEROSPACE</b>	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-41</b>	REV <b>11</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -43 OR -51	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 8/11/2004
	USED ON MODEL MD-500
	SHEET 46 OF 74



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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



NOTE:

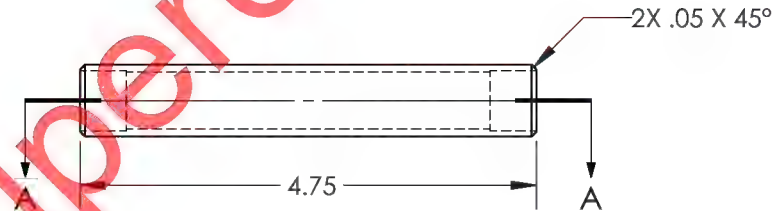
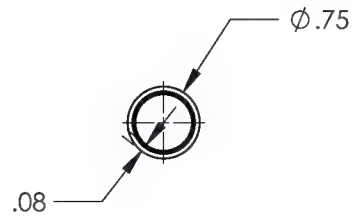
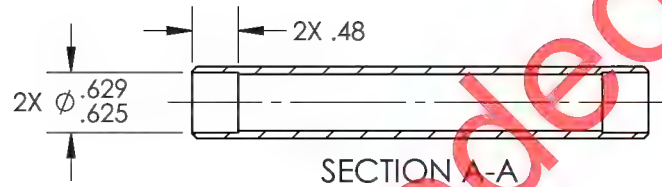
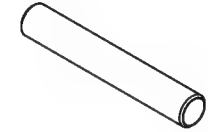
1 MASK THREADS PRIOR TO POWDER COATING.

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-43	REV 11
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FINISH POWDER COAT BLACK	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:3	DATE 8/11/2004
SHEET 47 OF 74	

-43  
LARGE TURNBUCKLE ASSEMBLY

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REVISIONS				DATE	INITIAL	APPROVED
REV	ECR					
11	15-0361	-45 CH'D DIM WAS Ø.63 IS .08 WALL THICKNESS, ADDED DIM 2X .625-.629 AND 2X .48.		11/16/2015	RJC	JAG



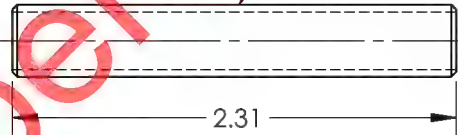
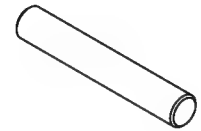
(-45)

TUBE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-45	REV 11
MAT'L CDS	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -51	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ±.5°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
SHEET 48 OF 74	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(3/8-16 UNC -2A LH THREAD)

2.31

-47

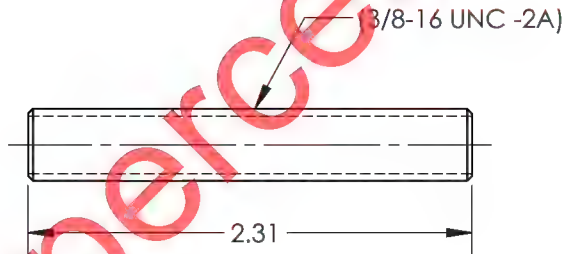
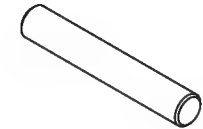
LH THREADED STUD



TITLE		MD-500 ENGINE LIFT	
DWG NO.		RBT18625-47	REV 11
MAT'L STEEL		UNLESS OTHERWISE SPECIFIED	
TREAT		DIMENSIONS ARE IN INCHES	
FINISH SEE -51		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ± .5°	
DRAWN BY: COLE		.X ± .1 SURFACES = 125°	
CHECKED: DUERFELDT		1. BREAK ALL SHARP EDGES	
OPPS APPR: ANDERSON		.015 x 45° OR .015R	
QA APPR: LINDSAY		2. DIMENSIONAL LIMITS APPLY	
APPROVED: GILBERT		AFTER PLATING	
SCALE 1:1		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DATE 8/11/2004		USED ON MODEL	
SHEET 49 OF 74		MD-500	

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REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED



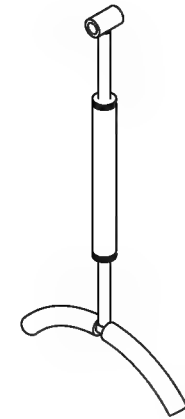
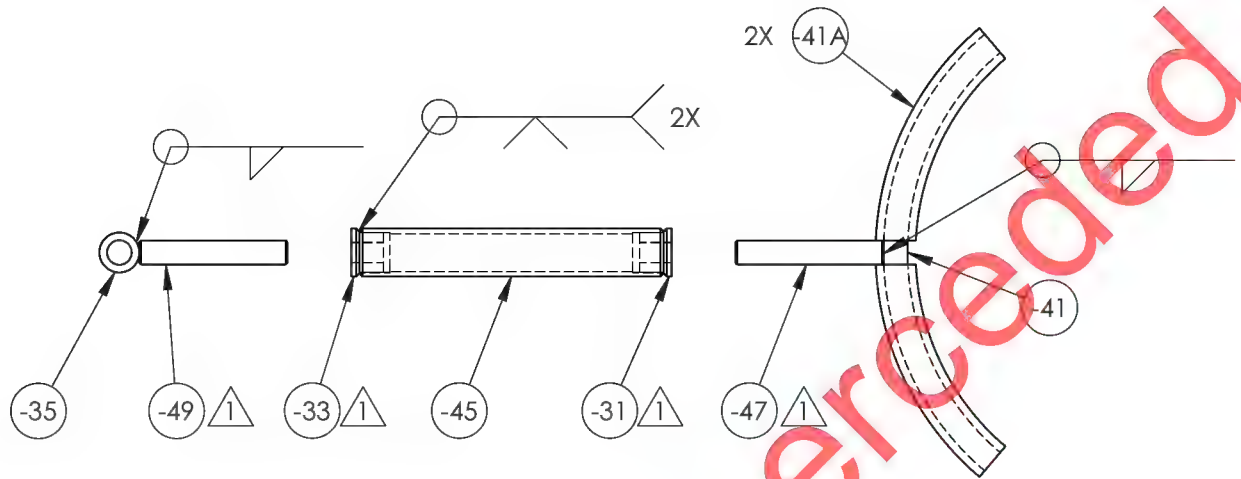
(-49)

THREADED STUD

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-49	REV 11
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -51	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 50 OF 74	MD-500

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(-51)

SMALL TURNBUCKLE ASSEMBLY

NOTE:

△ MASK THREADS PRIOR TO POWDER COATING.

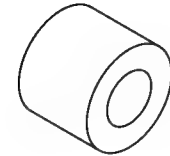
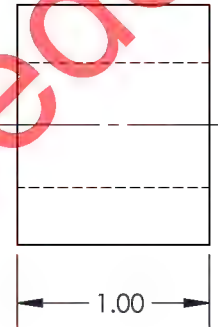
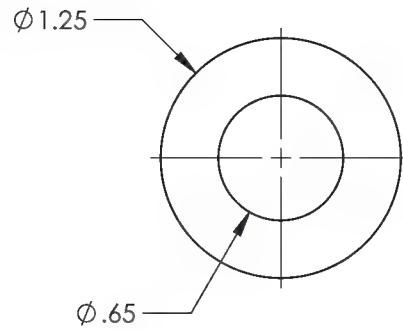
<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-51	REV 11
MAT'L HEAT TREAT FINISH POWDER COAT BLACK SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	MD-500
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:3	DATE 8/11/2004
SHEET 51 OF 74	

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-53 ADDED MISSING DIM .10, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-53A CH'D MATERIAL WAS 1018 IS 1018/1020 CR.	11/16/2015	RJC	JAG



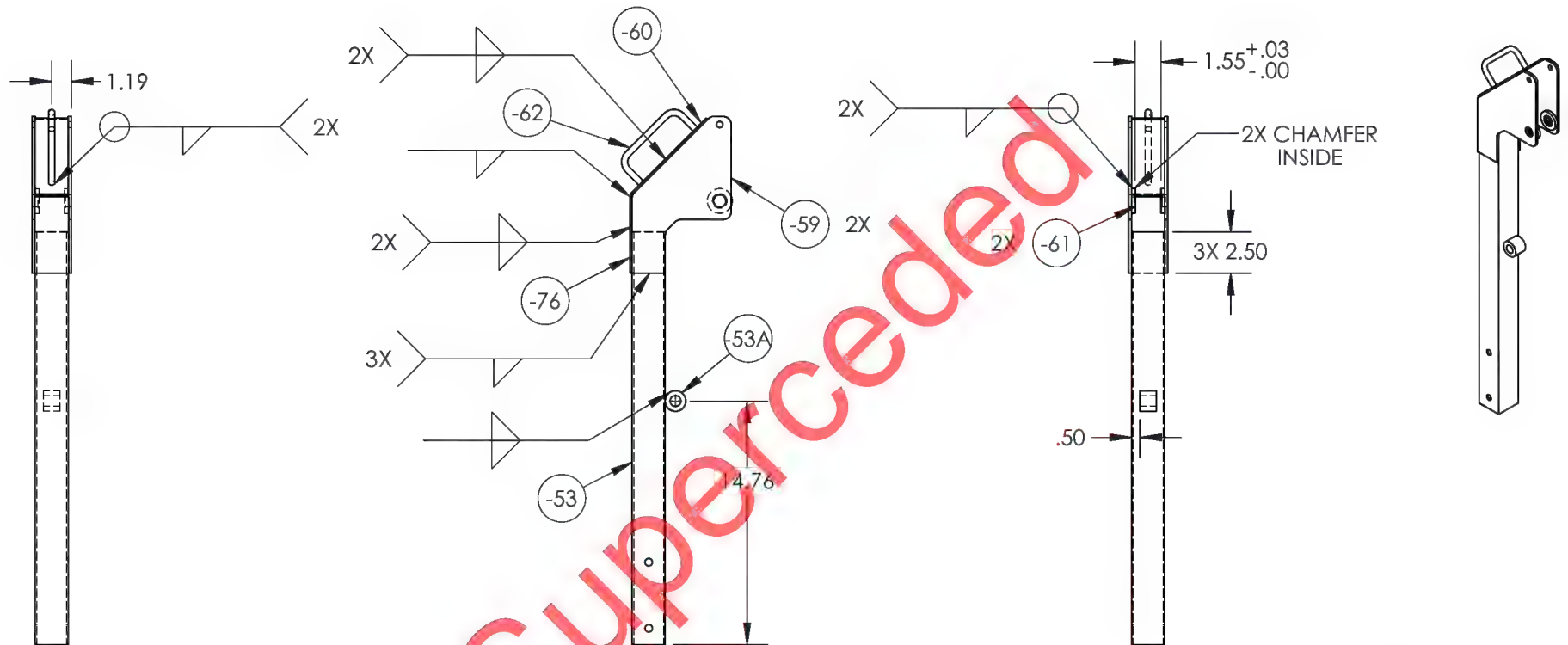
(-53A)

STORAGE RING

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-53A	REV 11
MAT'L 1018/1020 CR HEAT TREAT FINISH SEE -54 SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	
CHECKED: DUERFELDT	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:1	DATE 8/11/2004
SHEET 53 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
8		-54 ADDED -76 TO ASSY.	11/9/2009	RJC	RW
11	15-0361	-54 CH'D DRAWING TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



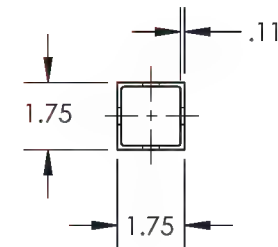
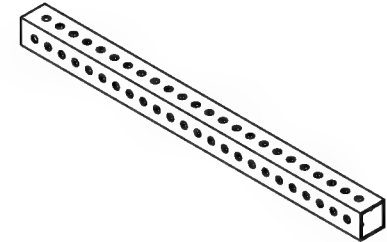
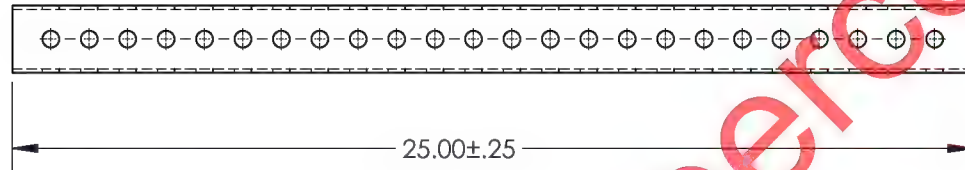
-54

UPRIGHT ASSEMBLY

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-54	REV 11
MAT'L TREAT FINISH POWDER COAT BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	MD-500
APPROVED: GILBERT	
SCALE 1:10	DATE 8/11/2004
SHEET 54 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-55 ADDED MISSING DIM .11, CH'D DIM WAS 25.0 ±.25 IS 25.00±.25.	1/27/2016	RJC	JAG



Superseded

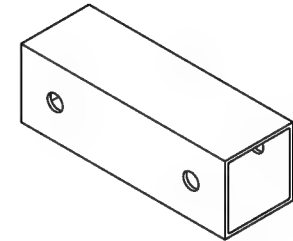
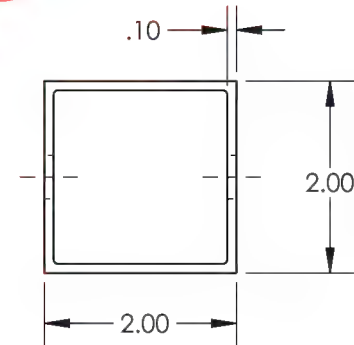
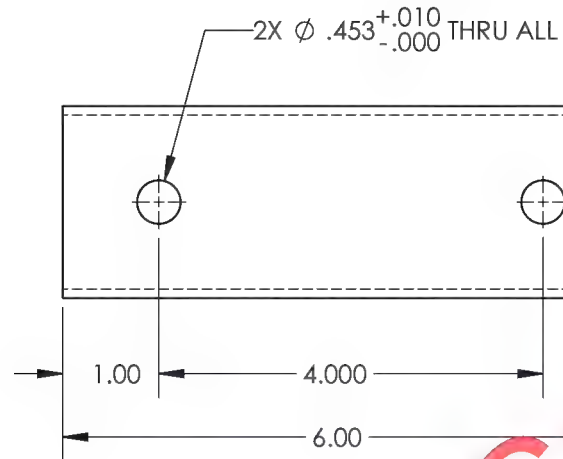
(-55)

MAST

<b>DART AEROSPACE</b>	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-55</b>	REV <b>11</b>
MAT'L STEEL TUBE TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL	
MD-500	
SCALE	1:5
DATE	8/11/2004
SHEET 55 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-57 ADDED MISSING DIM .10, CH'D DIM WAS 2X Ø.453 THRU ALL IS 2X Ø.453 +.010-.000 THRU ALL, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE, MOVED WELD NUT TO -66.	11/16/2015	RJC	JAG



Superseded

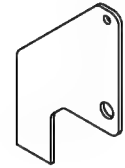
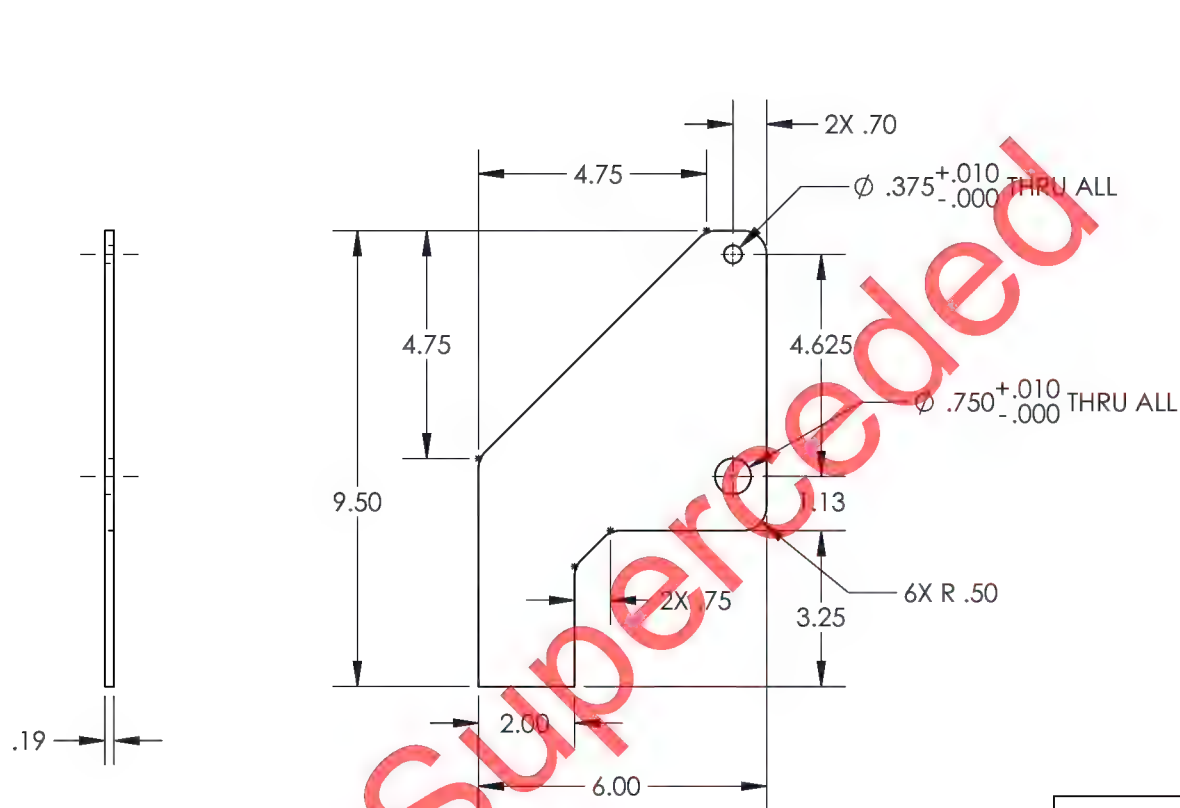
(-57)

SOCKET

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-57	REV 11
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 56 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-59 CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, CH'D DIM WAS Ø.375 THRU ALL IS Ø.375 +.010-.000 THRU ALL, WAS Ø.750 THRU ALL IS Ø.750 +.010-.000 THRU ALL, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG

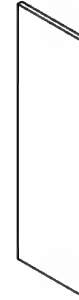
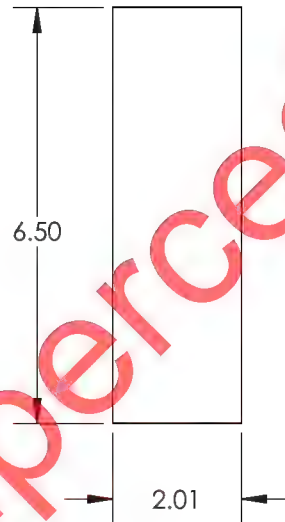
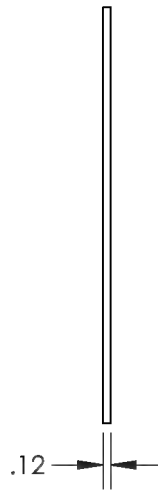


(-59)  
PIVOT BRACKET

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-59	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -54	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:4	DATE 8/11/2004
	SHEET 57 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
8		-60 CH'D DESCRIPTION FROM BACK PLATE.	11/9/2009	RJC	RW
10		-60 CH'D WIDTH FROM 2.06 TO 2.01	9/17/2013	JAG	
11	15-0361	-60 CH'D MATERIAL WAS HR SHEET IS 1018/1020 CR. CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



(-60)

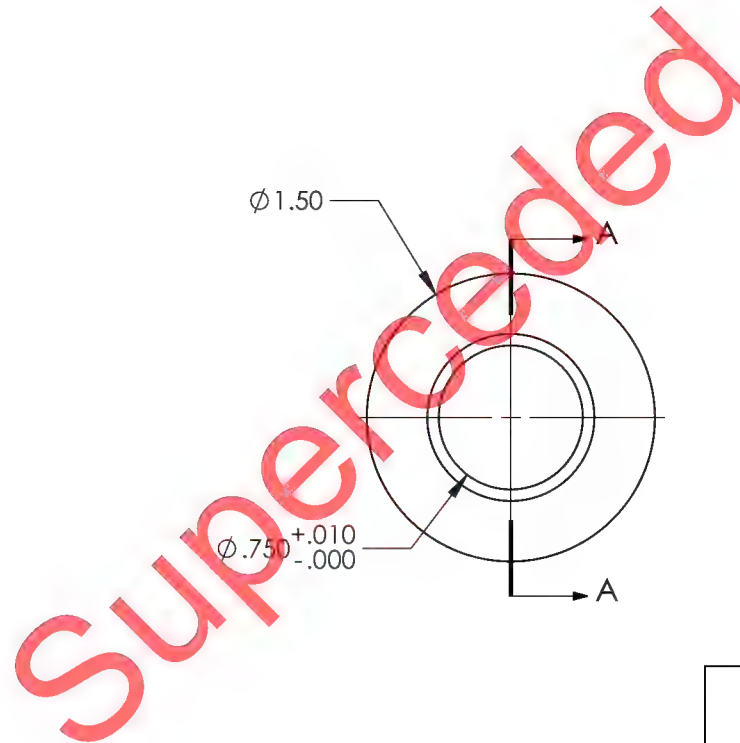
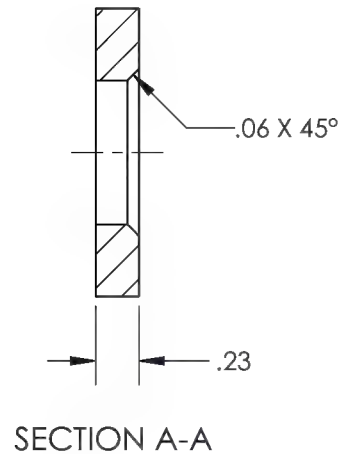
HANDLE PLATE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-60	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -54	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:3	DATE 8/11/2004
	SHEET 58 OF 74



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-61 CH'D MATERIAL WAS 1018 IS DOM, CH'D DIM WAS Ø.750 IS Ø.750 +.010-.000.	11/16/2015	RJC	JAG

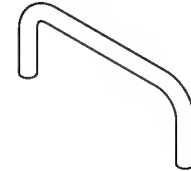
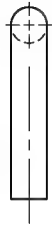


(-61)  
BUSHING

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-61	REV 11
MAT'L DOM 1018 IS DOM	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT SEE -54	.XXX ± .005 FRACTIONS ± 1/8
FINISH SEE -54	.XX ± .01 ANGLES ± .5°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:1	DATE 8/11/2004
SHEET 59 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-62 CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superceded

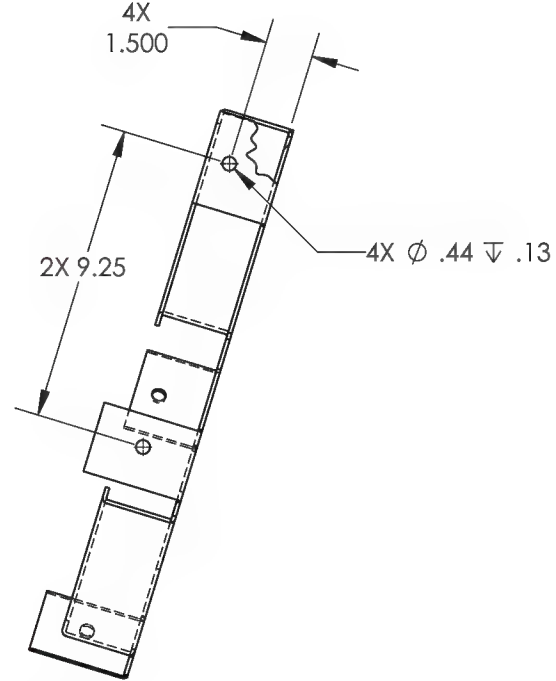
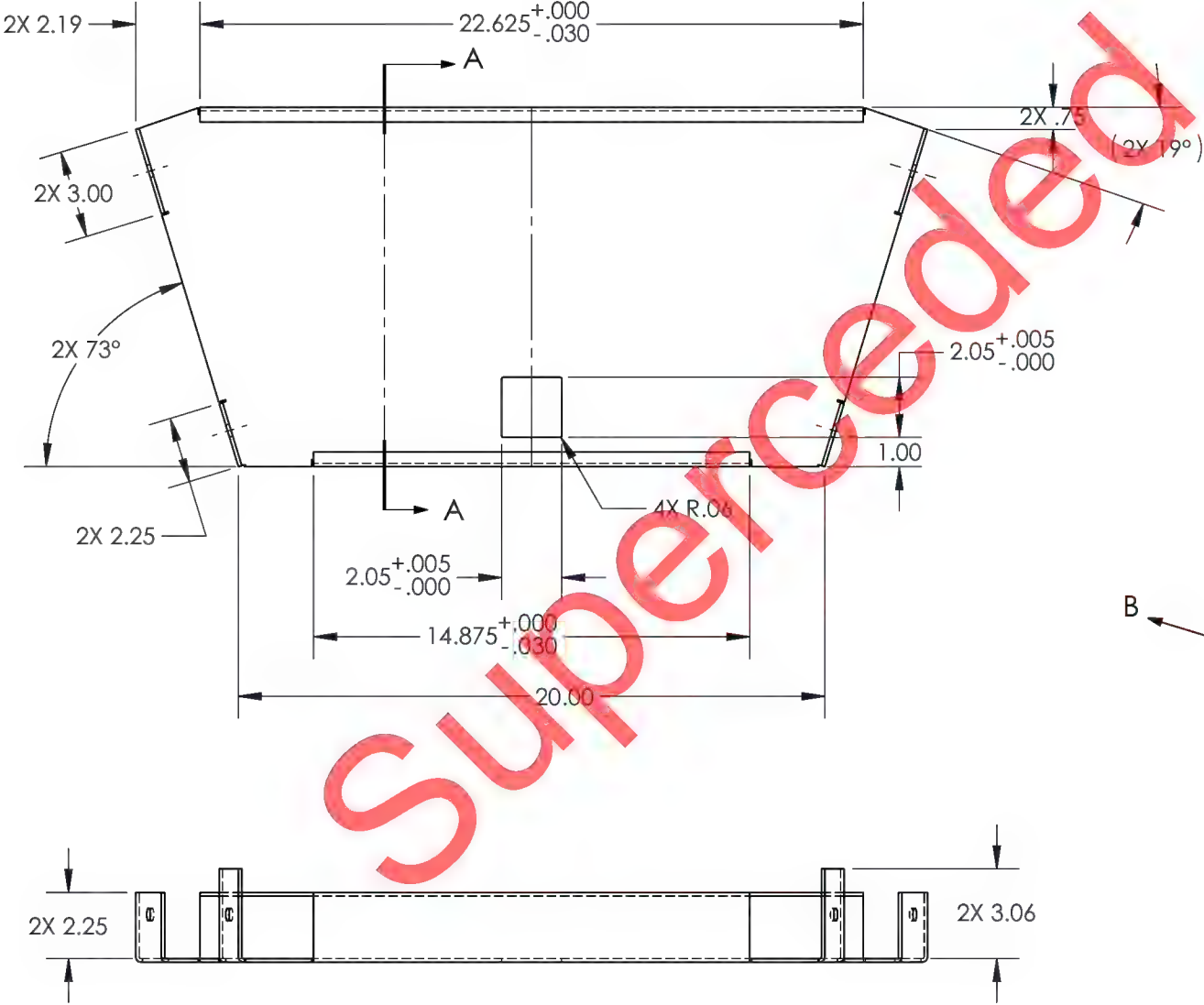
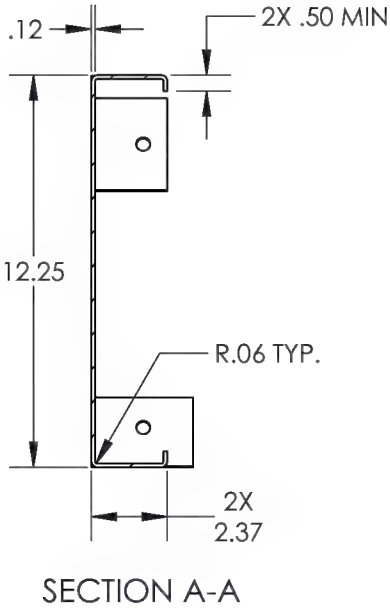
-62

HANDLE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-62	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -54	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:2	DATE 8/11/2004
	SHEET 60 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-63 FOLDED TABS REMOVED FROM VERTICLE ENDS.	4/25/2003		
3		-63 FRONT SLOTS OPENED ON THE INSIDE BY .1285, FRONT FACE NOW 22.75 LONG, SQUARE HOLE LOCATION & FORMED EDGE ADJUSTED TO ACHEIVE DESIRED ANGLE.	11/18/2004		
9		-63 CH'D LASER PATTERN DIMS, CH'D HOLE LOCATION TO 1.500.	1/18/2012	RJC	RW
10		-63 REMOVED FLAT PATTERN.	9/17/2013	JAG	
11	15-0361	-63 DELETED 2X MUST SLIP FIT 3 X 2 TUBING, CH'D DRAWING SHEET TO SHEET METAL TOLERANCES, CH'D DIM WAS 4X Ø.397 $\nabla$ .13 IS Ø.44 $\nabla$ .13, WAS 2.00 IS 2.05 $\pm$ .005-.000, WAS 2.02 IS 2.05 $\pm$ .005-.000, CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR.	11/16/2015	RJC	JAG



VIEW B-B

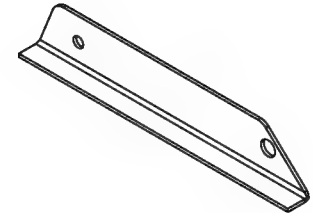
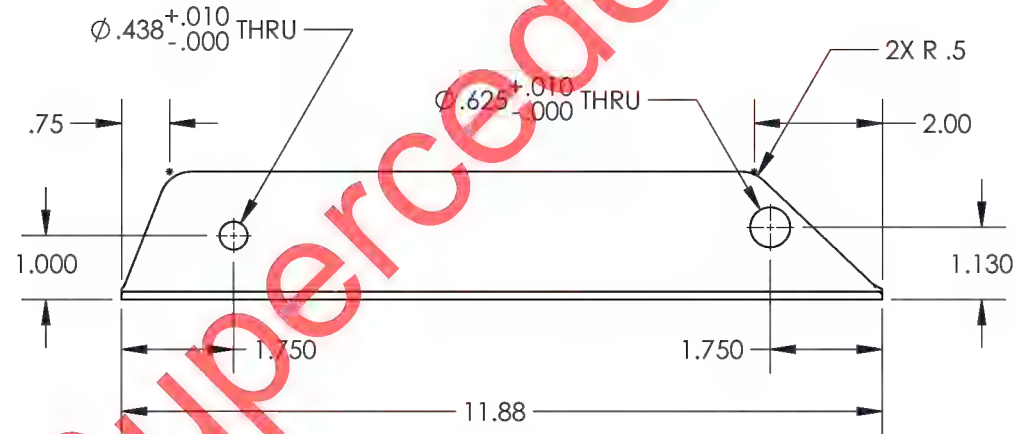
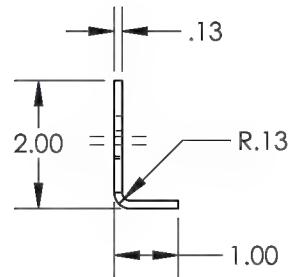
(-63)

BASE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-63	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX $\pm$ .010 FRACTIONS $\pm$ 1/8
FINISH SEE -66	.XX $\pm$ .03 ANGLES $\pm$ 1°
SPEC	.X $\pm$ .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:6	DATE 8/11/2004
SHEET 61 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-65L CH'D HOLE DIM. FROM BEND LINE TO BASE.	9/17/2013	JAG	
11	15-0361	-65L CH'D DRAWING SHEET TO SHEET METAL TOLERANCE, CH'D DIM WAS Ø.438 THRU IS Ø.438 +.010-.000 THRU, WAS Ø.625 THRU IS Ø.625 +.010-.000 THRU, CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR.	11/16/2015	RJC	JAG



Superseded

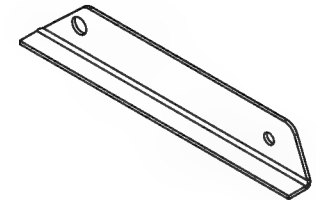
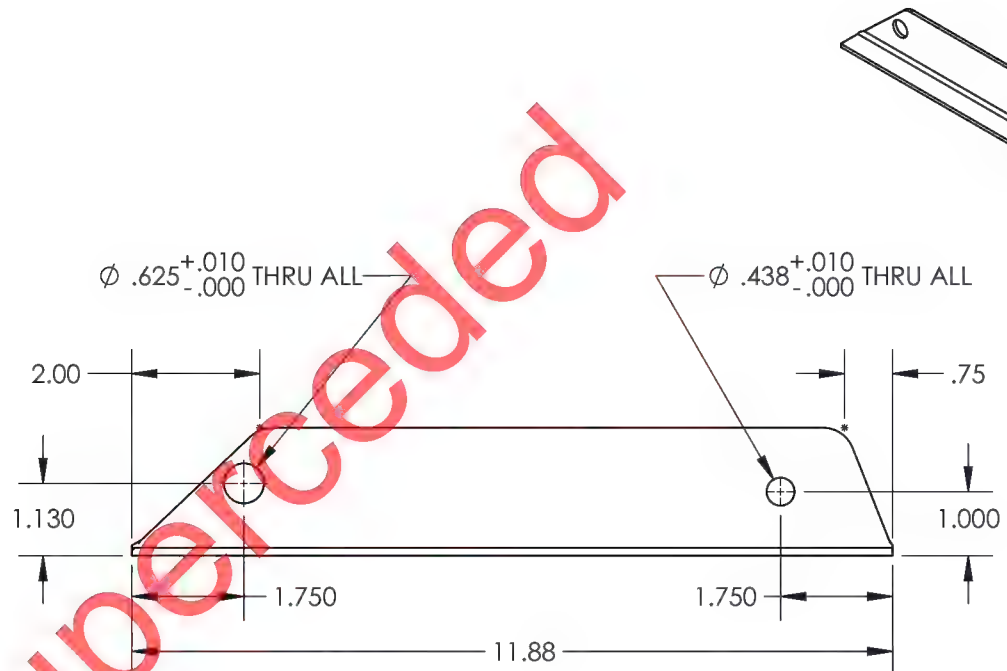
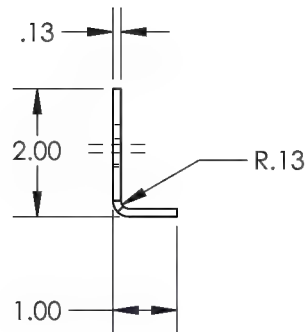
(-65L)

ANGLE BRACKET

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-65L	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:3	DATE 8/11/2004
	SHEET 62 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-65R CH'D HOLE DIM. FROM BEND LINE TO BASE.	9/17/2013	JAG	
11	15-0361	-65R CH'D DRAWING SHEET TO SHEET METAL TOLERANCE. CH'D DIM WAS Ø.438 THRU ALL IS Ø.438 +.010-.000 THRU ALL, WAS Ø.625 THRU ALL IS Ø.625 +.010-.000 THRU ALL. CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR. MOVED -148 TOP -66.	11/16/2015	RJC	JAG

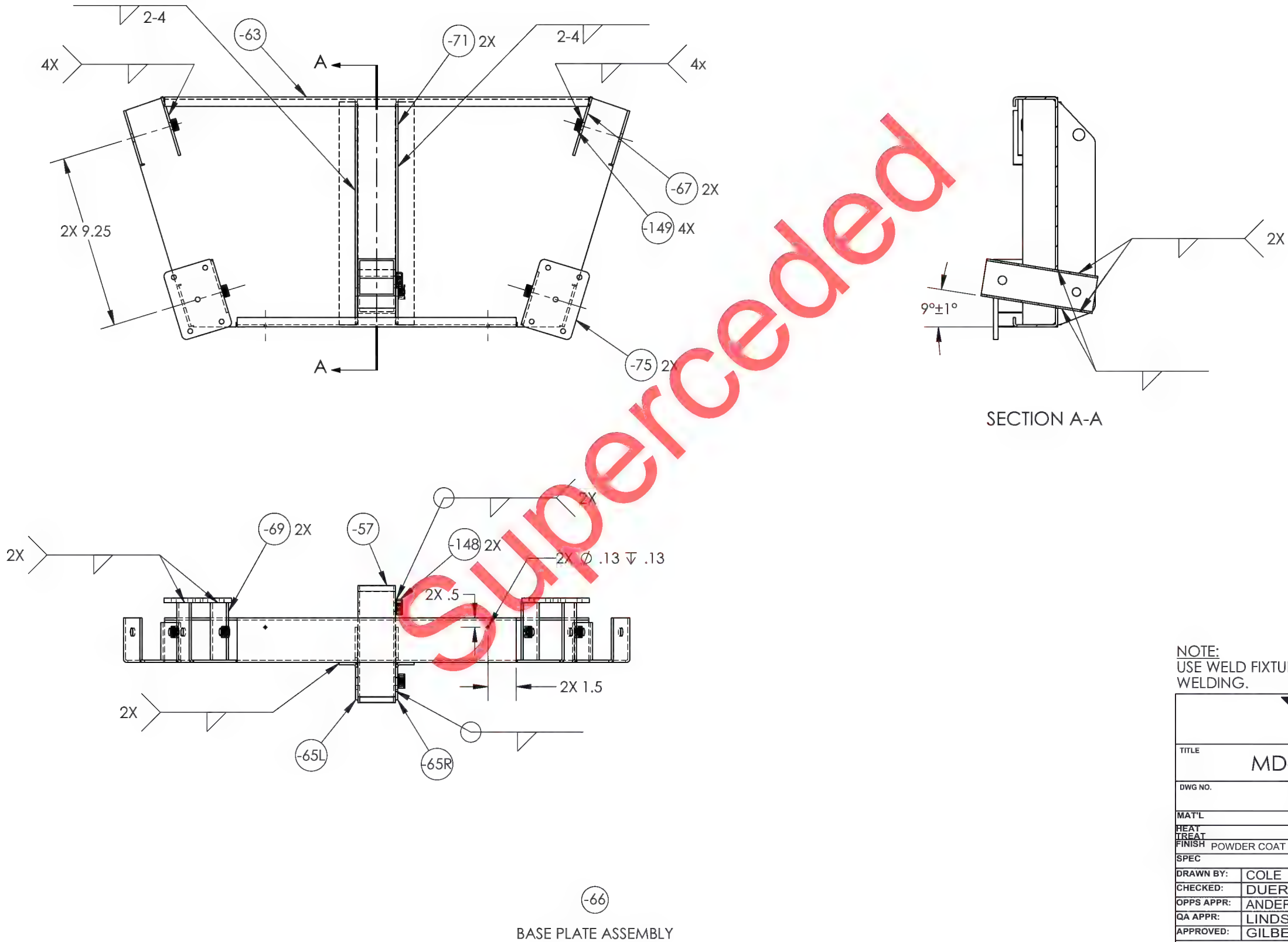


-65R  
ANGLE BRACKET

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-65R	REV 11
MAT'L A361018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH SEE -66	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	MD-500
SCALE 1:3	DATE 8/11/2004
SHEET 63 OF 74	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
11	15-0361	-66 CH'D DRAWING SHEET TO SHEET METAL TOLERANCE, ADDED DIM 9° ±1, ADDED MISSING WELD SYMBOLS, ADDED -148 AND -149.	11/16/2015	RJC
				JAG



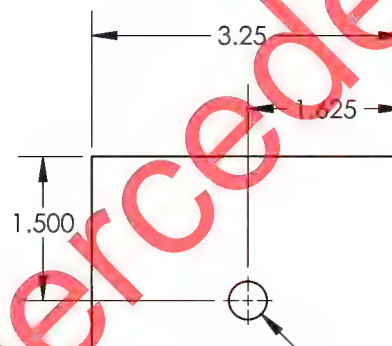
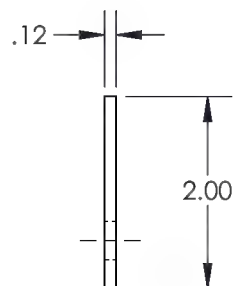
NOTE:  
USE WELD FIXTURE RBT18625-66 TO POSITION FOR WELDING.

DART AEROSPACE			
TITLE MD-500 ENGINE LIFT			
DWG NO. RBT18625-66			REV 11
MAT'L HEAT TREAT FINISH POWDER COAT BLACK SPEC		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ±1° .X ± .1 SURFACES = 125°	
DRAWN BY: COLE		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED: DUERFELDT		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY		USED ON MODEL	
APPROVED: GILBERT		MD-500	
SCALE 1:6	DATE 8/11/2004	SHEET 64 OF 74	

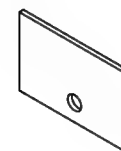


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9		-67 CH'D HOLE FROM Ø.386 TO Ø.397.	1/18/2012	RJC	RW
10		-67 CH'D DIM. FROM 1.530 TO 1.500 TO FIT -63 BASE.	9/17/2013	JAG	
11	15-0361	-67 CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR, MOVED 3/8-16 WELD NUT (-149) TO -66 , CH'D DIM WAS Ø.397 THRU ALL IS Ø.397 +.010-.000. CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Ø .397<sup>+.010</sup><sub>-.000</sub> THRU ALL



Superceded

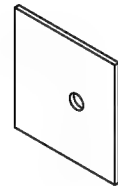
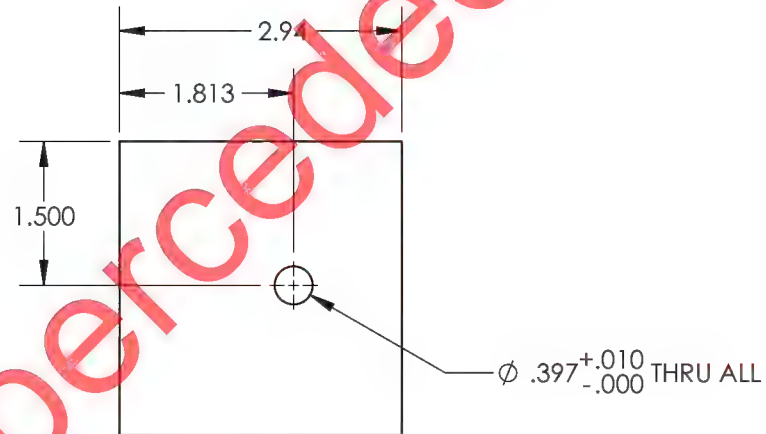
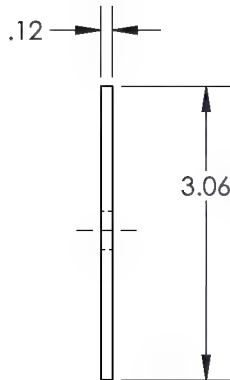
(-67)

FORWARD TAB

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-67	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 65 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9		-69 CH'D HOLE FROM Ø.386 TO Ø.397.	1/18/2012	RJC	WP
10		-69 CH'D DIM. FROM 1.530 TO 1.500 TO FIT -63 BASE.	9/17/2013	JAG	
11	15-0361	-69 CH'D MATERIAL WAS HR SHEET IS A36/1018/1020 HR, CH'D DIM WAS Ø.397 THRU ALL IS Ø.397 +.010-.000, MOVED 3/8-16 WELD NUT (-149) TO -66, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superseded

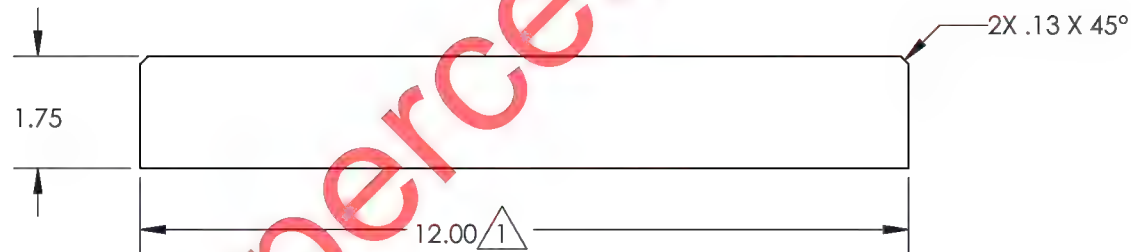
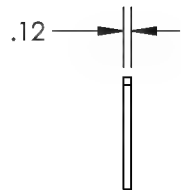
(-69)

AFT TAB

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-69	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 8/11/2004
	SHEET 66 OF 74

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-71 CH'D MATERIAL WAS HR SHEET IS A36/1018/1020HR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



NOTE:  
 1 GRIND TO FIT INSIDE -66 BASE.

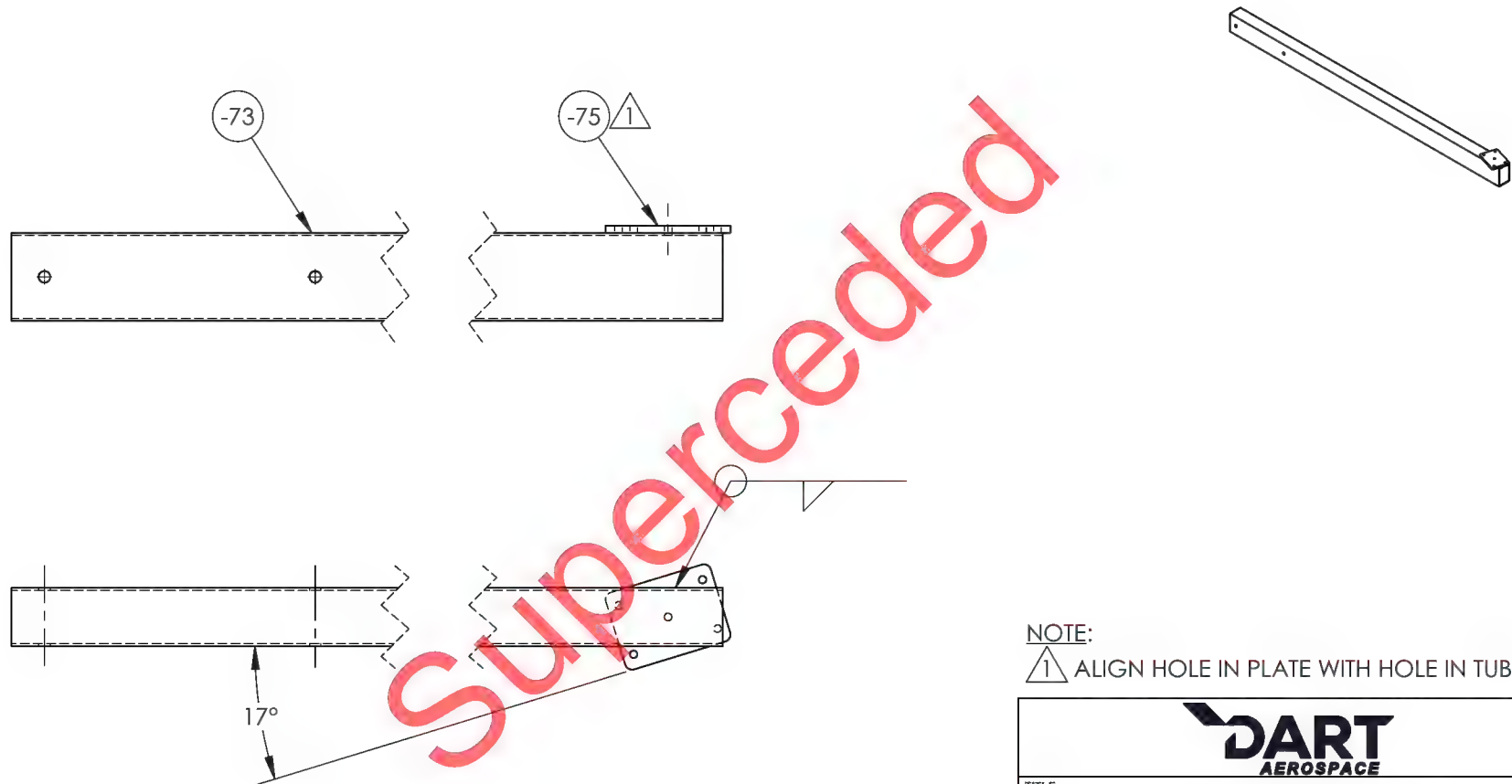
Superceded

(-71)  
 STIFFENER

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-71	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:3	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
SHEET 67 OF 74	MD-500

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-73L CH'D SHEET TO SHEET METAL TOLERANCE, CH'D DESCRIPTION WAS LEFT LEG IS LEFT LEG WELDMENT.	11/16/2015	RJC	JAG



NOTE:

△ ALIGN HOLE IN PLATE WITH HOLE IN TUBE.



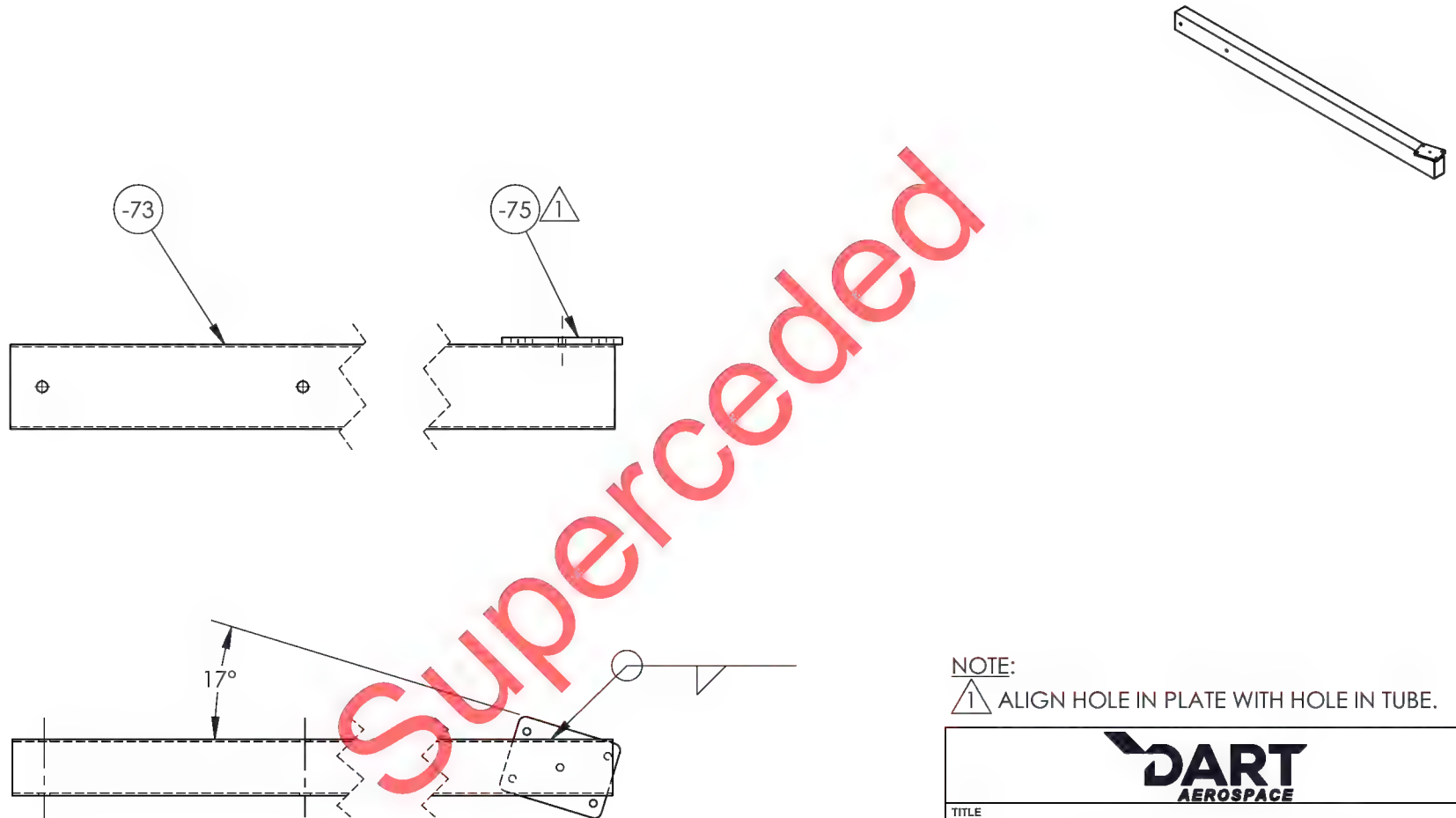
TITLE		MD-500 ENGINE LIFT	
DWG NO.		RBT18625-73L	REV 11
MAT'L	UNLESS OTHERWISE SPECIFIED		
FEAT	DIMENSIONS ARE IN INCHES		
TREAT	.XXX ± .010 FRACTIONS ± 1/8		
FINISH	POWDER COAT BLACK		
SPEC	.XX ± .03 ANGLES ± 1°		
	.X ± .1 SURFACES = 125°		
DRAWN BY:	COLE	1. BREAK ALL SHARP EDGES	
CHECKED:	DUERFELDT	.015 x 45° OR .015R	
OPPS APPR:	ANDERSON	2. DIMENSIONAL LIMITS APPLY	
QA APPR:	LINDSAY	AFTER PLATING	
APPROVED:	GILBERT	3. INTERPRET DIM AND TOL PER	
		ASME Y14.5M-2009	
SCALE	1:6	DATE	8/11/2004
		SHEET 68 OF 74	

-73L

LEFT LEG WELDMENT

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-73R CH'D SHEET TO SHEET METAL TOLERANCE, CH'D DESCRIPTION WAS RIGHT LEG IS RIGHT LEG WELDMENT.	11/16/2015	RJC	JAG



NOTE:

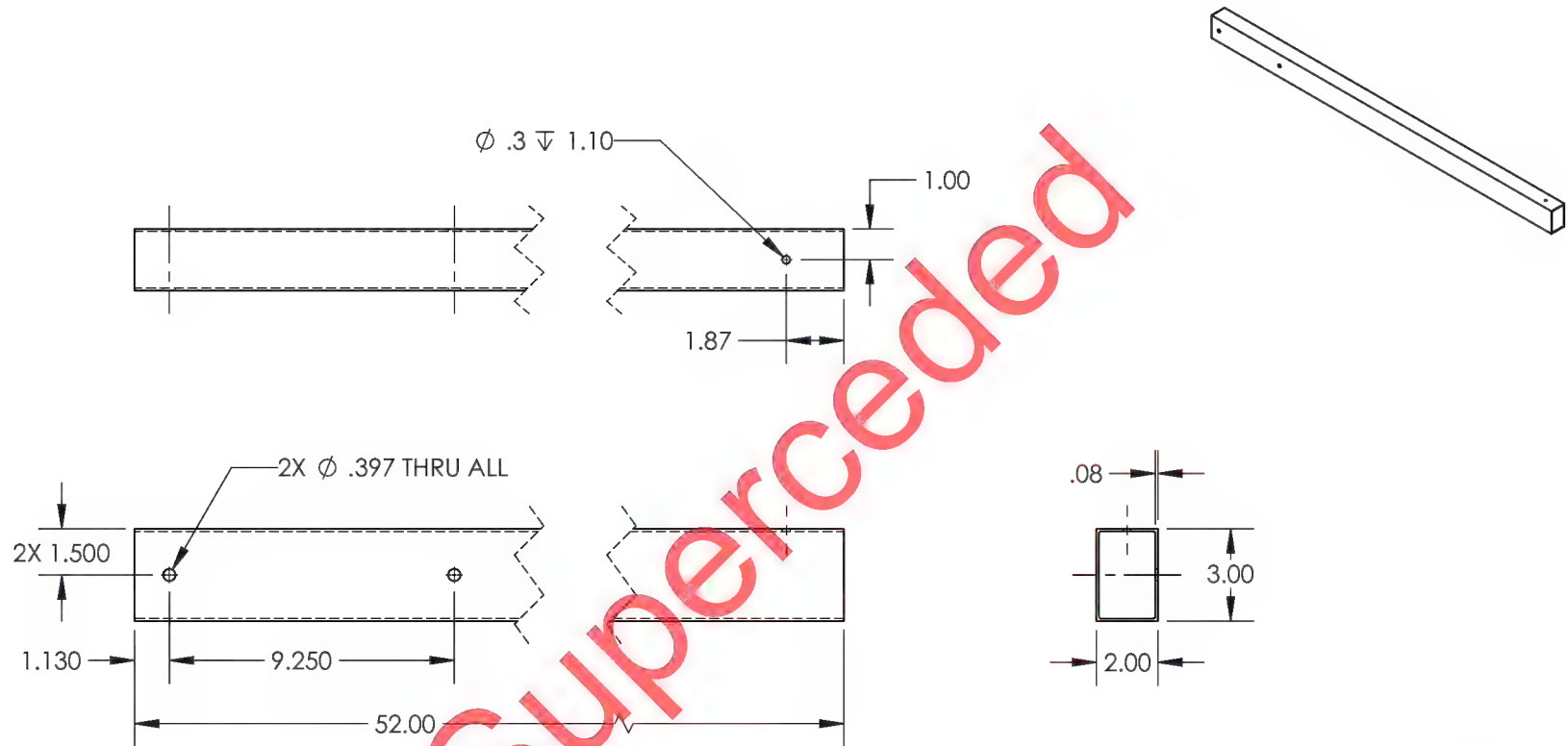
△ 1 ALIGN HOLE IN PLATE WITH HOLE IN TUBE.

-73R  
RIGHT LEG WELDMENT

<b>DART</b> AEROSPACE	
TITLE <b>MD-500 ENGINE LIFT</b>	
DWG NO. <b>RBT18625-73R</b>	REV <b>11</b>
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
DRAWN BY: <b>COLE</b>	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: <b>DUERFELDT</b>	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: <b>ANDERSON</b>	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: <b>LINDSAY</b>	USED ON MODEL
APPROVED: <b>GILBERT</b>	<b>MD-500</b>
SCALE <b>1:6</b>	DATE <b>8/11/2004</b>
SHEET 69 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
10		-73 ADDED DIMENSIONS FOR 2 HOLES.	9/17/2013	JAG	
11	15-0361	-73 ADDED MISSING DIM'S .08 AND 2.00, CH'D DIM WAS 2X Ø.386 THRU ALL IS 2X Ø.397 THRU ALL, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG

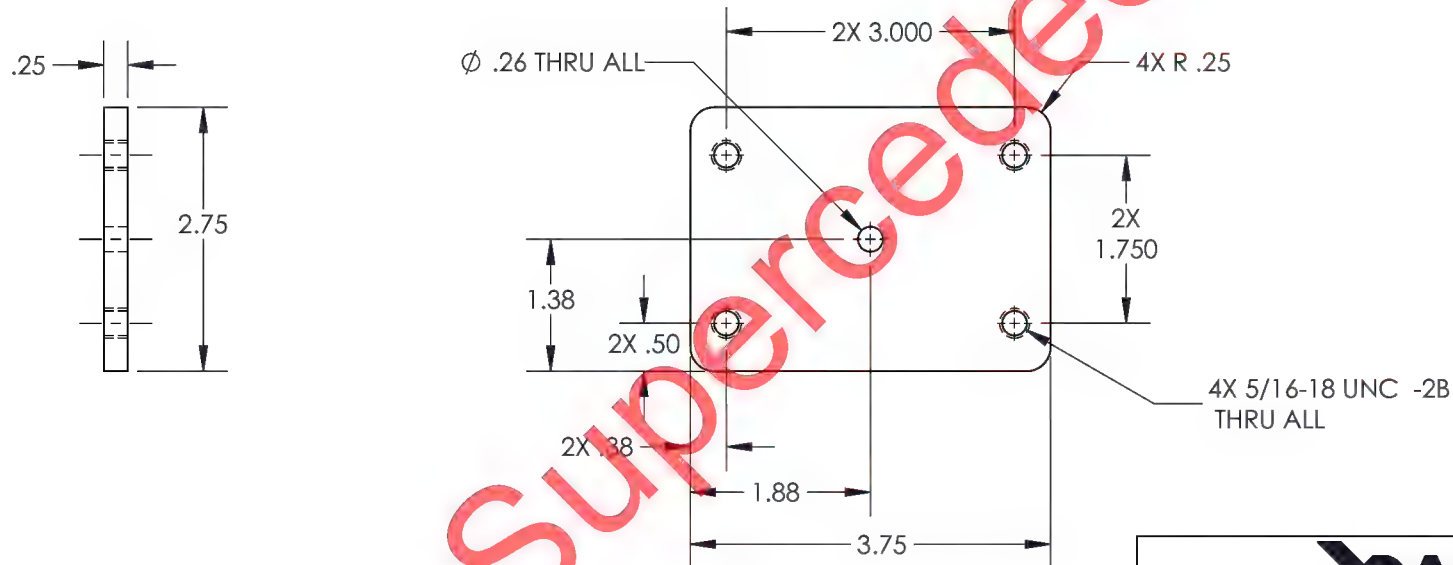
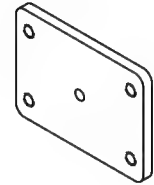


(-73)  
LEG

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-73	REV 11
MAT'L STEEL TUBE HEAT TREAT FINISH SEE -73R OR -73L SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL MD-500	
SCALE 1:6	DATE 8/11/2004
SHEET 70 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11	15-0361	-75 CH'D MATERIAL WAS 1018/ IS 1018/1020 CR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



(-75)

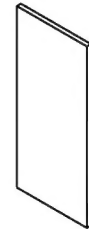
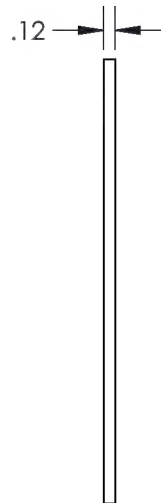
WHEEL PLATE

<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-75	REV 11
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -66, -73R, -73L	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:2	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 8/11/2004	USED ON MODEL
	MD-500
	SHEET 71 OF 74



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
8		-76 ADDED PART DRAWING.	11/9/2009	RJC	RW
11	15-0361	-76 CH'D MATERIAL WAS T018 IS A36/1018/1020 HR, CH'D DRAWING SHEET TO SHEET METAL TOLERANCE.	11/16/2015	RJC	JAG



Superceded

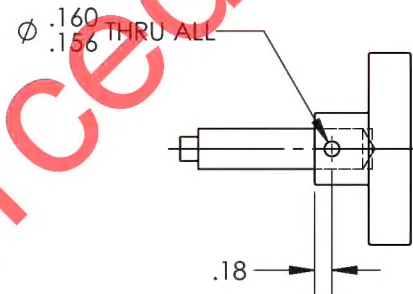
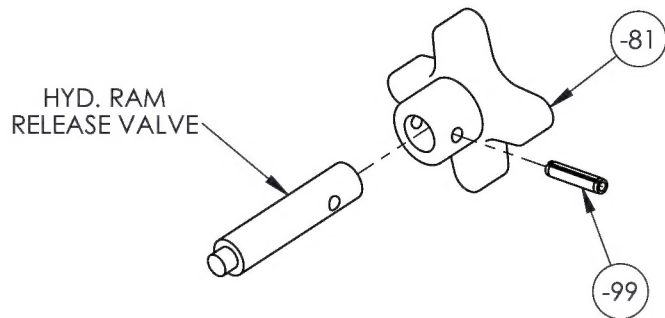
(-76)

BACK PLATE

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-76	REV 11
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -54	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	MD-500
SCALE 1:2	DATE 8/11/2004
	SHEET 72 OF 74

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
7		-79 ADDED ROLL PIN & KNOB DRAWING.	10/1/2009	WP

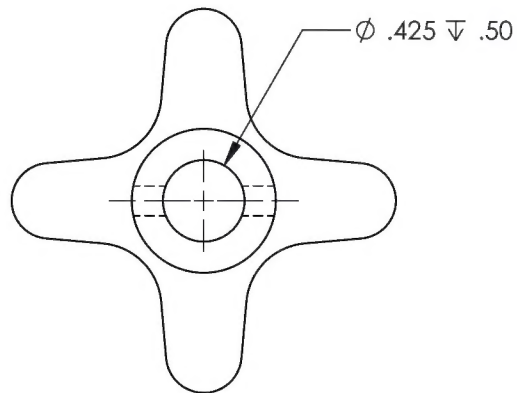
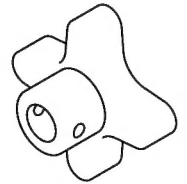


(-79)  
KNOB ASSEMBLY

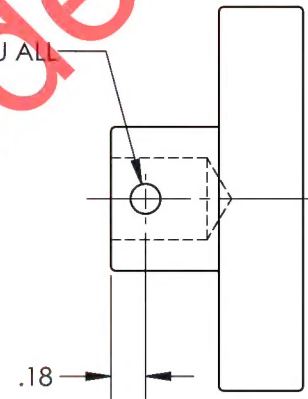
<b>DART AEROSPACE</b>	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-79	REV 11
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	
SCALE 1:2	DATE 8/11/2004
SHEET 73 OF 74	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
7		-81 ADDED ROLL PIN & KNOB DRAWING.	10/1/2009	WP	
11	15-0361	-81 ADDED BLACK OXIDE FINISH.	11/16/2015	RJC	JAG



$\phi .160$   
 $\phi .156$  THRU ALL



Superseded

(-81)

HAND KNOB

<b>DART</b> AEROSPACE	
TITLE MD-500 ENGINE LIFT	
DWG NO. RBT18625-81	REV 11
MAT'L IRON HEAT TREAT FINISH BLACK OXIDE SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$ .005 FRACTIONS $\pm$ 1/8 .XX $\pm$ .01 ANGLES $\pm$ 5° .X $\pm$ .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: PERRITT	USED ON MODEL
CHECKED: DUERFELDT	MD-500
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:1	DATE 10/1/2009
SHEET 74 OF 74	

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____ Part No. <u>RBT18625</u> NCR No. _____		<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b> <table border="0"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Cross tube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Cross tube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																																															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																																																																					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval  April 12, 2018																																																																
<b>Description Work Order Deviation</b> Alternative items for the BOM are listed below: -41A HOSE Ø3/8 ID X 3-5/8 = <b>McMaster Carr 5034K24</b> -81 HAND KNOB MSC #82397241 = <b>McMaster Carr 6042K39</b> -146 NO-SKID GASKET SPECIALTIES 1.75 X 7.9 = <b>McMaster Carr 6970T13</b>				<b>Disposition</b> - This deviation is acceptable. - The fit, form and function of the tool will be as originally intended.				<b>Completed By</b>  <b>Lead hand / Supervisor Approval Verification</b>  <b>QC / QA Coordinator Approval</b>																																																															
<b>Root Cause</b> <table border="0"> <tr> <td>Environment <input type="checkbox"/></td> <td>No Re-verification <input type="checkbox"/></td> </tr> <tr> <td>Design <input checked="" type="checkbox"/></td> <td>Operator <input type="checkbox"/></td> </tr> <tr> <td>Doc/Data <input type="checkbox"/></td> <td>Offset/Setup <input type="checkbox"/></td> </tr> <tr> <td>Equip/Tooling <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> </tr> <tr> <td>Handling/Pre <input type="checkbox"/></td> <td>Training <input type="checkbox"/></td> </tr> <tr> <td>Material <input type="checkbox"/></td> <td>Use for Testing <input type="checkbox"/></td> </tr> <tr> <td>Internal Transport <input type="checkbox"/></td> <td>Poor Information <input type="checkbox"/></td> </tr> <tr> <td>Tribal Knowledge <input type="checkbox"/></td> <td>Rushing <input type="checkbox"/></td> </tr> <tr> <td>LOA <input type="checkbox"/></td> <td>Product Improvement <input type="checkbox"/></td> </tr> <tr> <td>Substation <input checked="" type="checkbox"/></td> <td>Process Improvement <input type="checkbox"/></td> </tr> <tr> <td>Past Expiry Date <input type="checkbox"/></td> <td>Manufacturing Process <input type="checkbox"/></td> </tr> <tr> <td>Misidentified <input type="checkbox"/></td> <td>Past Due <input type="checkbox"/></td> </tr> </table>				Environment <input type="checkbox"/>	No Re-verification <input type="checkbox"/>	Design <input checked="" type="checkbox"/>	Operator <input type="checkbox"/>	Doc/Data <input type="checkbox"/>	Offset/Setup <input type="checkbox"/>	Equip/Tooling <input type="checkbox"/>	Supplier <input type="checkbox"/>	Handling/Pre <input type="checkbox"/>	Training <input type="checkbox"/>	Material <input type="checkbox"/>	Use for Testing <input type="checkbox"/>	Internal Transport <input type="checkbox"/>	Poor Information <input type="checkbox"/>	Tribal Knowledge <input type="checkbox"/>	Rushing <input type="checkbox"/>	LOA <input type="checkbox"/>	Product Improvement <input type="checkbox"/>	Substation <input checked="" type="checkbox"/>	Process Improvement <input type="checkbox"/>	Past Expiry Date <input type="checkbox"/>	Manufacturing Process <input type="checkbox"/>	Misidentified <input type="checkbox"/>	Past Due <input type="checkbox"/>	<b>FAULT CATEGORY</b> <table border="0"> <tr> <td>Pressure/Forced <input type="checkbox"/></td> <td>Temperature/Cure <input type="checkbox"/></td> <td>Power Loss/Surge <input type="checkbox"/></td> <td>Positioned Wrong <input type="checkbox"/></td> </tr> <tr> <td>Bending <input type="checkbox"/></td> <td>Set-up <input type="checkbox"/></td> <td>Folio/Program <input type="checkbox"/></td> <td>Outside Dimensions <input type="checkbox"/></td> </tr> <tr> <td>Centre Not Concentric <input type="checkbox"/></td> <td>BOM/Route <input type="checkbox"/></td> <td>Grain <input type="checkbox"/></td> <td>Over/Under tolerance <input type="checkbox"/></td> </tr> <tr> <td>Cracks <input type="checkbox"/></td> <td>Broken/Damage/Defect <input type="checkbox"/></td> <td>Weld <input type="checkbox"/></td> <td>Part Incorrect <input type="checkbox"/></td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave <input type="checkbox"/></td> <td>Inspection Incomplete/Unqualified <input type="checkbox"/></td> <td>Wrong Stock Pulled <input type="checkbox"/></td> <td>Part Lost/Missing <input type="checkbox"/></td> </tr> <tr> <td>Cuffs <input type="checkbox"/></td> <td>Contamination <input type="checkbox"/></td> <td>Out of Sequence <input type="checkbox"/></td> <td>Part Moved <input type="checkbox"/></td> </tr> <tr> <td>Crushing <input type="checkbox"/></td> <td>Countersink <input type="checkbox"/></td> <td>Off-set <input type="checkbox"/></td> <td>Drawing <input type="checkbox"/></td> </tr> <tr> <td>Heat Treat <input type="checkbox"/></td> <td>Cut Too Short <input type="checkbox"/></td> <td>Mislabeled <input type="checkbox"/></td> <td>Finish <input type="checkbox"/></td> </tr> <tr> <td>Wave/Twist in Tube <input type="checkbox"/></td> <td>Instructions Incomplete/Unclear <input type="checkbox"/></td> <td>Fit/Function <input type="checkbox"/></td> <td>Misread <input type="checkbox"/></td> </tr> <tr> <td>Marks/Chatter <input type="checkbox"/></td> <td>Drill Holes <input type="checkbox"/></td> <td>Misaligned/off center <input type="checkbox"/></td> <td>Turning Sequence <input type="checkbox"/></td> </tr> </table>				Pressure/Forced <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Bending <input type="checkbox"/>	Set-up <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Weld <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Off-set <input type="checkbox"/>	Drawing <input type="checkbox"/>	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Finish <input type="checkbox"/>	Wave/Twist in Tube <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Misread <input type="checkbox"/>	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Turning Sequence <input type="checkbox"/>
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